

# **Economic Growth and Human Development Linkages in Uttar Pradesh**

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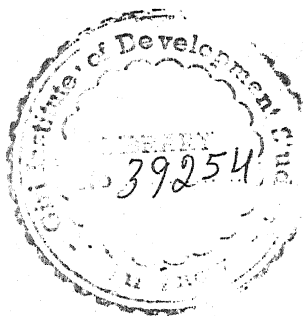
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## I. Introduction

In the early development literature economic development was defined in terms of growth of total or per capita income. Limitations of this approach soon became evident and concept of development was gradually broadened to include other aspect of well being. Today, the concept of human development has dethroned per capita income as a measure of development from the high pedestal it enjoyed earlier. Human development approach emphasizes three components of development: per capita income levels, educational attainment and health status. Human development does not ignore the importance of economic growth, but looks at it not as the end but only as a means for human development.

In the present paper we have analysed the inter linkages between economic growth and human development in the state of Uttar Pradesh, which ranks among the economically and socially most backward states of the country. The study is based on the analysis of available secondary data on various dimensions of economic growth and human development. The analysis is expected to throw up important policy conclusions to enable the state to undertake more effective policy initiatives for speedy improvement in the levels of human development in the state.

The paper is divided into eight sections including this introductory section. In Section II we have identified the various interlinkages between economic growth and human development based on *a priory* reasoning and available empirical studies. Section III highlights some features of the U.P. scenario in terms of economic and human development. Findings of inter-district analysis have been presented in Section IV. Section V briefly discusses the trends in economic growth, poverty and unemployment in the state in the last two-three decades. Section VI and VII are devoted to an analysis of education and health sector issues in the state respectively. Role of public policy and trends in public expenditure on social sectors are analysed in Section VIII. The final section gives the concluding remarks.

## II. Interlinkages Between Growth and Human Development

The *Human Development Report 1996* has focused on economic growth and human development. It has noted with concern that globalization is increasing inequality and widening the gap between rich and the poor, particularly in regard to social services like education and health. Policy makers should therefore not be 'mesmerized by the quantity of economic growth.' They need to be more concerned with the structure and quality of growth.

Unless governments take timely corrective measures economic growth can become lop-sided and flawed. If the overall economy grows but does not expand the opportunities for employment, it is simply *jobless* growth. Where the fruits of economic growth mostly benefit the rich, leaving a large number of people in ever growing poverty, it is *ruthless* growth. If the economic growth has not been accompanied by an extension of democratic norms and empowerment of masses by encouraging their participation, it is *voiceless* growth. If the growth is causing the peoples' cultural identity to wane away and wither away under the overwhelming influence of globalization, it is *rootless* growth. Where the present generation squanders resources needed by future generations and rampant and uncontrolled economic growth results by irrational and wasteful use of resources, it may be termed as *futureless* growth.

In the developing countries conscious efforts are needed to avoid growth that is jobless, ruthless, voiceless, rootless and futureless. Economic growth that perpetuates these is neither sustainable nor worth sustaining. Owing to flawed priorities in the effort for achieving economic growth, human progress has been very slow. Region and group wise deficiency in human development is particularly noteworthy.

There are strong two way linkages between the three components of human development, i.e., income levels, educational attainment and health status. Economic growth is an essential pre-requisite for human development as higher income levels are required to meet the basic physical and social needs of the people, increase their access to educational and health facilities and generate higher revenues to the government to investment in economic and social infrastructure. Thus, economic growth enlarges the freedom of choice both for the individual and the society. But how these choices are exercised and their outcome on human development would depend on the decisions of individual households and the government.

The outcomes of economic growth in terms of human development depend on a number of factors like the pace, pattern and structure of growth. A process of spatially widespread, employment intensive and socially equitable economic growth is more conducive for human development. Deliberate intervention is required to see that the benefits of growth are equitably shared and growth does not lead to increased misery and joblessness for different sections of the people. Economic growth is thus a necessary but not a sufficient pre-condition for human development. The focus of the policy makers, therefore, must be on strengthening the links between economic growth and human development. Some of the important links include the following:

- The more equitable national/state income and economic opportunities are distributed, the more likely that they will be translated into improved human well being.
- Economic growth is translated into people's lives when they are offered productive and well paid work. Patterns of labour intensive growth will be an important way to achieve it.

- Economic opportunities are stifled if people do not have access to productive assets like land, physical infra structure and financial credit. Government can help improve the access.
- Increased social spending on education, health and other priority social sectors can greatly influence human development.
- Investing in women's capabilities and empowering them to exercise their choices is the surest way to contribute to economic growth and human development.
- Education, reproductive health and child survival all help lower fertility, thus creating the conditions for slower population growth and lowering education and health costs for the society.
- Good governance can help improve the efficiency of economic growth and its links to human development.
- Non governmental organization (NGOs), community groups and the civil society also play a vital part in enhancing human development.

Human development in its turn contributes to the process of economic growth. Studies show that two-thirds or more of economic growth is explained by improvement in human and social capital (Human Development Report 1996). In fact, a high level of per capita income cannot be attained if the people lag behind in terms of educational attainment and health status. Educational attainment has strong positive impact on labour productivity and earning levels. Similarly, improvement in health status will lead to higher productivity and higher incomes. Thus, an educated and healthy work force is conducive for higher economic growth. On the other hand, low levels of human development will retard the process of economic growth.

There are strong linkages between the other two components of human development as well, i.e., education and health. Studies, within the country and abroad, show that there are strong spatial convergence between education, health outcomes and women status (Dreze and Sen 1995 & 1996; UNDP 1996). It is well established empirically that higher literacy has a strong positive impact on infant and child mortality, maternal mortality, fertility levels, age at marriage, life expectancy and women empowerment (Murty et al 1996). The correlation matrix at the state level confirms this (Table 1).

Thus, both *a priory* reasoning and empirical analysis establishes that economic growth and human development are interlinked processes. But there happen to be situations where there is lack of convergence between economic growth and human development. For a good number of countries the human development index does not match the income rankings. Many countries with relatively higher level of income show lower levels of human development. On the other hand, some countries rank high in human development index despite low per capita income, e.g. Shri Lanka. Similar situations are observed at the state level in India. Punjab and Kerala provide the classic case. The latter has a much higher level of human development as compared to Punjab, although its per capita income is much lower than in the latter state. There are also situations where different components of human development diverge from one

another. For instance, the high educational and health status of women in Kerala is not reflected in their high participation in economic activity or political representation (FICCI 2005).

The interlinkages between economic attainment and human development do not operate automatically and there may be situations where there is a divergence between the two. In this context, both public policy and social environment play an important role. Where public policy gives priority to human development it is possible to attain a higher level of human development even at relatively low per capita income. The best example is provided by the case of Kerala, where public policy and social movements laid the foundation of high attainment in education and health status. Similarly, a more conducive social environment, where parents and society place higher valuation on education, one can have a better human development status. Uttaranchal, the former hill region of UP is an example. The region scores much better in human development indicators than the other regions of UP. On the other hand, in societies and regions where strong gender bias exists due to economic and socio-cultural values as in Punjab, Haryana, West UP, human development indicators for women are likely to be depressed irrespective of the higher income levels.

Table 1: Correlation Matrix between Female Literacy and Demographic Indicators at State Level in India: Late Nineties

Indicators	BR	DR	IMR	CPR	TFR	Life Expectancy (female)	Female Literacy	Median age at marriage
Birth Rate	1.00	0.69	0.71	-0.82	0.98	-0.78	-0.82	-0.73
Death Rate	0.69	1.00	0.87	-0.74	0.69	-0.88	-0.69	-0.58
Infant Mortality Rate	0.71	0.87	1.00	-0.56	0.71	-0.92	-0.79	-0.64
Couple Protection Rate	-0.82	-0.74	-0.56	1.00	-0.82	0.72	0.77	0.63
Total Fertility Rate	0.98	0.69	0.71	-0.82	1.00	-0.79	-0.85	-0.76
Life expectancy female	-0.78	-0.88	-0.92	0.72	-0.79	1.00	0.87	0.78
Female Literacy	-0.82	-0.69	-0.79	0.77	-0.85	0.87	1.00	0.80
Median age at marriage	-0.73	-0.58	-0.64	0.63	-0.76	0.78	0.80	1.00

Source: Calculated from interstate data on selected variables taken from IMR-SRS Bulletin, April 2002; Economic Survey, 2002.

Note: All values above 0.50 are significant at 5% level.

### III. Overview of Human Development Scenario in U.P.

UP presents a dismal scenario with regard to economic growth and human development. It is characterized by low levels of per capita income, high incidence of poverty, sluggish economic growth, high population pressure with high rates of population growth, high birth and fertility rates, wide spread illiteracy, high infant

mortality and death rates and low life expectancy. In many of the indicators UP's position is comparable to some of the poorest countries of sub-Sahara Africa (Dreze and Gazdar 1996, p.39). In terms of most of the human development indicators U.P. ranks 13th or 14th out of the 15 major states of the country, while in terms of poverty ratio it ranks 11<sup>th</sup> (Table 2).

Table 2: Selected Human Development Indicators for UP and Other States

States	IMR	Life Expectancy	Literacy Rate		Sex Ratio 0 to 6 yrs	Per Capita NSDP (Rs)	% Persons below Poverty Line
			Total	Female			
	2000	2001	2001	2001	2001	1998-99	1999-00
Andhra Pradesh	65	63.9	61.11	51.17	978	13993	15.8
Assam	75	59.9	64.28	56.03	932	8826	36.1
Bihar	62	65.2	47.53	33.57	921	4474	42.6
Gujarat	62	63.6	69.97	58.6	921	18815	14.1
Haryana	67	67.0	68.59	56.31	861	19716	8.7
Karnataka	57	64.4	67.04	57.45	964	15420	20.0
Kerala	14	73.3	90.92	87.86	1,058	16029	12.7
Madhya Pradesh	87	58.6	64.11	50.28	920	10682	37.4
Maharashtra	48	68.3	77.27	67.51	922	20356	25.0
Orissa	95	59.9	63.61	50.97	972	8324	47.2
Punjab	52	70.9	69.95	63.55	874	21184	6.2
Rajasthan	79	62.5	61.03	44.34	922	12348	15.3
Tamil Nadu	51	68.4	73.47	64.55	986	17613	21.1
Uttar Pradesh	83	63.8	57.36	42.98	898	8633	31.2
<b>Rank of UP</b>	<b>(13)</b>	<b>(11)</b>	<b>(14)</b>	<b>(14)</b>	<b>(13)</b>	<b>(13)</b>	<b>(11)</b>
West Bengal	51	67.7	69.22	60.22	934	13614	27.0
<b>India</b>	<b>68</b>	<b>65.4</b>	<b>65.38</b>	<b>54.16</b>	<b>933</b>		<b>26.1</b>

Source: IMR-SRS Bulletin, April 2002; Economic Survey, 2002.

Table 3: Statewise Human Development Index 1981, 1991 and 2001

States	1981		1991		2001	
	Value	Rank	Value	Rank	Value	Rank
Andhra Pradesh	0.298	9	0.377	9	0.416	10
Assam	0.272	10	0.348	10	0.386	14
Bihar	0.237	15	0.308	15	0.367	15
Gujarat	0.360	4	0.431	6	0.479	6
Haryana	0.360	5	0.443	5	0.509	5
Karnataka	0.346	6	0.412	7	0.478	7
Kerala	0.500	1	0.591	1	0.638	1
Madhya Pradesh	0.245	14	0.328	13	0.394	12
Maharashtra	0.363	3	0.452	4	0.523	4
Orissa	0.267	11	0.345	12	0.404	11
Punjab	0.411	2	0.475	2	0.537	2
Rajasthan	0.256	12	0.347	11	0.424	9
Tamil Nadu	0.343	7	0.466	3	0.531	3
Uttar Pradesh	0.255	13	0.314	14	0.388	13
West Bengal	0.305	8	0.404	8	0.472	8

Source: Tenth Five Year Plan 2002-2007, Vol. III, Planning Commission, pp 58.

According to Planning Commission estimates U.P. occupied the 13<sup>th</sup> rank in HDI in 1981. It slipped to 14<sup>th</sup> rank in 1991, but again reverted to the 13<sup>th</sup> rank in 2001 (Table 3). Only Assam and Bihar rank lower than U.P. in HDI. The value of HDI has, however, steadily improved from 0.255 in 1981 to 0.314 in 1991 and to 0.388 in 2001. The value of Human Poverty Index in U.P. in 1991 was 46.65 against the national average of 37.42. In Gender Disparity Index also U.P. ranked at 14<sup>th</sup> position among major states.

The state average situation conceals more than it reveals as there are wide variations in the levels of human development among regions, sex and social groups and between rural and urban areas in U.P. A proper understanding of U.P. scenario requires attention to these variations. A brief analysis of these variations is, therefore, presented below.

### **Rural and Urban Divide**

UP economy is characterized by low level of urbanization and significant rural-urban disparities in levels of income, infrastructure and social development. Nearly 80% of the state population still lives in the rural areas. Western region is relatively more urbanized with an urbanization ratio of 28.25%. In many districts particularly in the Eastern region less than 10% of the population is urban. The pace of urbanization has also been rather slow. Literacy levels in the rural areas are relatively lower and the medical facilities are extremely poor (see section VI and VII). This is reflected in the differences in the HDI levels in the rural and the urban areas. The value of HDI for U.P\* in 1991 was 0.284 for rural areas as compared to 0.444 in urban areas. The value of Human Poverty Index was 50.02 and 32.62 in the rural and urban areas respectively.

### **Inter-Regional Variations**

Presently, the state is divided into four economic regions, namely, Western, Central, Eastern and Bundelkhand. The first three regions fall in the fertile Gangetic plains well endowed with good soil and water resources. Bundelkhand forms part of the dry central plateau region. There are sharp variations in the levels of economic and social development across the four regions in the state (Table 4). Economically Western region is the most developed with higher levels of urbanization, greater diversification of the economy, better infrastructure, higher agricultural productivity, higher per capita income levels and lower poverty levels. Eastern region and Bundelkhand are officially recognized as the backward regions. The former region suffers from high population pressure and low degree of diversification of the economy, the latter region falls in the drought prone dry region. Economic infrastructure is also relatively less developed in these two regions. Central region scores relatively better in economic indicators as compared to the two backward regions. However, poverty incidence in the region is quite high. In terms of social indicators like literacy level, however, the inter-regional differences are not so marked (Table 4). All the four economic regions also show considerable intra-regional variations at the district level (Singh 2002). As Dreze and Gazdar observe "Western Uttar Pradesh has failed to take advantage of its comparative

prosperity to achieve any kind of lead in the field of literacy and education” (Dreze and Gazdar 1996, pp. 49-51).

Table 4: Indicators of Economic Development in Various Regions of U.P.

Development Indicator	Eastern Region	Western Region	Central Region	Bundel khand Region	U.P.
Density Of population (per sq.km.), 2001	776	765	658	280	689
% Of Urban Population to total population, 2001	11.78	28.25	25.11	22.46	20.78
% Share in state's population, 2001	40.11	36.76	18.17	4.96	100.00
Total Literacy (%), 2001	55.22	58.44	59.04	60.32	57.36
Per capita power consumption (kwh), 1998-99	169.2	206.8	172.6	122.2	181.1
% of electrified villages to total villages, 99-00	76.78	88.81	71.71	68.37	79.08
Average size of Holding (in Ha), 1995-96	0.65	1.02	0.83	1.72	0.86
Net sown area per capita rural (ha), 1998-99	0.10	0.14	0.14	0.26	0.11
Per capita gross value of industrial output in Rs., 1991-92	796	2845	1439	748	1663
Main workers engaged in agriculture to total main workers (1991)	77.3	66.7	72.9	78.4	72.8
Per rural person gross value of agricultural produce in Rs., 1997-98	2435	4876	3543	3949	3594
Per capita net output from commodity producing sector in Rs., 1997-98	6269	9882	7881	7910	8273

Source: *Tenth Five Year Plan, U.P., Vol. 1, Part 1.*

A reference to the erstwhile hill region of Uttar Pradesh, which was carved as a separate Uttaranchal state in November 2000, would be pertinent here. This region, even though it formed part of the same political and administrative set up as the rest of U.P., presents a very distinct scenario in terms of human development. Both male and female literacy have been much higher in this region as compared to other regions. Female work participation rates are also been distinctly higher in this region. It has been a traditionally high out-migration area. As the local employment opportunities were limited in the region, education was seen by the people of the region as a means for getting better paid jobs outside. Consequently, much higher valuation on education of children was placed by the people of this region. Higher literacy levels also led to improvement in health indicators and reduction in IMR and CMR. Women status is also much better in this region. Thus, the social environment of the hill region was

more conducive to progress in terms of human development, in spite of low economic and employment opportunities in the region.

### **Gender Inequality and Role of Women Agency**

U.P. presents an extreme case of gender inequality even among the backward states. Uttar Pradesh is lagging behind most of the other states in terms of indicators of women development. The gap is particularly high in case of indicators like female literacy, work participation rate and life expectancy. On the other hand, fertility rate in U.P. is much above the national average. Sex ratio in the state is low and has been declining. Female literacy rates are much lower than the male literacy rates. Female work participation rates are extremely low. Infant and child mortality rates among girls are higher as compared to the boys. Female life expectancy is lower than male life expectancy unlike the situation in most parts of the world. The poor indicators of women status in U.P. are reflective of the fact that the prevailing socio-cultural milieu in the state discriminates against women. The role of women's agency is particularly weak in U.P., which has implications not only for the well being of women but also for economic development and social progress in the society as a whole (Dreze and Gazdar 1996, p. 56).

#### ***If I am a girl child in Uttar Pradesh***

- *I would be lucky to survive on birth, nine out of ten chances of reaching age one, and a slightly lesser chance of reaching age five.*
- *I am not certain I will reach school. I might most probably be helping my mother with the care of siblings and other household chores.*
- *I will be married early, much before my 18<sup>th</sup> birth day.*
- *I may conceive before I am 18 years old and go through several pregnancies.*
- *I am not sure all my children will survive.*
- *There may not be enough to eat in the house all the year round.*
- *I may not live beyond 50 years.*

*Sarala Gopalan in Vision 2020: The Profile of Empowered Women*

### **Inequality among Social and Religious Groups**

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### **Inequality among Social and Religious Groups**

U.P. is marked by sharp economic and social inequalities among different social and religious groups. Around one-fifth of the people of the state belong to the socially and economically depressed scheduled castes, Scheduled tribes, however, have a negligible presence in the state. Muslims, among whom the literacy and income levels are relatively low, constitute around one-sixth of the state population. Numerically the

largest group consists of the backward communities, which again lack in educational attainment, though some of them have acquired economic and political clout in the recent past. Thus, a very sizeable part of the state population belongs to the deprived groups, which tends to depress the human development indicators of the state.

A recent field study of 2000 households in rural areas of West U.P. brings out the sharp contrast in the socio-economic status of the various castes and social groups (Singh 2003). The study reveals that assetlessness among SC and Muslim population is very high (Table 5). The level of illiteracy was also much higher in these two groups with backward castes close behind (Table 6). The study further revealed that around 24% of children belonging to backward and scheduled castes and around 28% of children belonging to Muslims were not going to school (Table 7).

Table 5: Per Cent Households Reporting Ownership of Land by Social Groups In Rural West U.P.

Caste	% Households Owning Land	Average Size of Landholding (acres)
Upper Castes	63.79	3.04
Intermediate Castes	93.17	3.61
Backward Castes	82.59	2.57
Scheduled Castes	47.51	1.96
Muslims	38.67	0.91
All Households	75.20	2.86

Source: Ajit Kumar Singh (2003).

Table 6: Percent of Illiterate Population by Social Groups in Rural West U.P.

Caste	Males	Females	Persons
Upper Castes	20.06	34.13	26.16
Intermediate Caste	22.84	45.95	32.80
Backward Castes	37.85	65.48	52.64
Schedules Castes	40.97	66.73	52.47
Muslims	48.90	69.52	58.21
All Households	35.52	58.78	45.73

Source: Ajit Kumar Singh (2003)

Table 7: Per Cent of Children between 5 and 15 Years Not Going To School by Social Groups in Rural West U.P.

Caste	Boys	Girls	Total
Upper Castes	7.00	4.90	6.21
Intermediate Caste	5.60	12.23	8.03
Backward Castes	22.00	26.41	23.87
Scheduled Castes	22.30	24.61	23.30
Muslims	27.85	28.81	28.30
All Households	16.83	21.29	18.70

Source: Ajit Kumar Singh (2003).

NSS data reveals that the incidence of poverty is much higher among SC and ST households in U.P. (Table 8). Nearly 60% of SC households were below poverty line in U.P. in 1993-94. However, this proportion came down to 43% in 1999-00. The pace of decline of poverty was faster for the SC/ST households as compared to other households during this period.

Table 8: Poverty Incidence for SC/ST and Other Households in UP

Year	Caste Group	Incidence of Poverty			Percentage of:	
		Urban	Rural	Overall	Population	Poor
1987-88	SC / ST	48.3	56.2	55.3	24	32
	Other	35.7	37.5	37.2	76	68
	<i>Overall</i>	37.4	42.3	41.5	100	100
1993-94	SC / ST	57.5	58.6	58.4	23	33
	Other	31.3	37.0	35.7	77	67
	<i>Overall</i>	35.0	42.4	40.9	100	100
1999-00	SC / ST	42.5	43.0	42.9	24	33
	Other	28.4	26.9	27.2	76	67
	<i>Overall</i>	30.7	31.1	31.0	100	100

Source: World Bank (2002)

Strong social and economic bias in the labour market persists in the state against the SC and Muslims. They are mostly confined to low paid jobs in agriculture and the informal sector. Their presence in organized sector employment is minimal. Findings from a recent study show that low caste households not only are worse off in terms of assets, but also experience lower returns to the minimal assets that they do possess (World Bank 2002). The study found returns to land as well as most levels of education to be lower for scheduled caste households (see box 1).

### Box 1

#### Low Returns To Human And Physical Assets Of SC/ST Households

*Findings from a recent study (Lanjouw and Zaidi, 2001) show that low caste households not only are worse off in terms of assets, but also experience lower returns to the minimal assets that they do possess, including their stock of human capital.*

*A regression model was employed using data from the 1993-94 NSS survey, in order to estimate determinant of per capita expenditure of SC/ST households and other households. Results indicated that only half the difference in per capita consumption could be explained on the basis of differences in asset holdings, while the other half was attributable to differences in returns. The study found returns to land as well as most levels of education to be lower for Scheduled caste households.*

**Source: World Bank (2002)**

## Failures of Public Policy

The low achievements of U.P. in social development cannot be explained in terms of its low per capita income levels alone. Much of the blame can be put on the failure of public policy, which accorded low priority to social sectors. Public investment in education and health sectors remained low throughout the planning period. The entrenched upper caste elites did not show sufficient concern for raising the educational levels of the SC, Muslims and other backward communities. As Dreze and Gazdar observe "whether we look at health care provisions, or at educational facilities, or at the public distribution system, or indeed at almost any essential public services for which relevant data are available, Uttar Pradesh stands out as a case of resilient government inertia as far as public provisioning is concerned" (Dreze and Gazdar, 1996, p. 53). The inertia of public policy in U.P. stands out strikingly against the proactive role of public policy in Kerala as far as the social sectors are concerned. This is particularly so as the levels of per capita incomes were roughly the same in the two states not long back. The World Development Report 2004 also draws attention to this contrast (WDR 2004, pp. 43-44).

Low levels of public expenditure on education and health are only one part of the story (we revert to this point in Section VIII). The other side of the story is the poor quality of public services and inequity in access to them. There has been a visible deterioration in the functioning of public institutions in the state. The state of primary schools in U.P. has been well illustrated by Dreze and Gazdar (1996). Not only public schools and hospitals are understaffed and ill-equipped, the teachers and hospital staff are often found missing from their duty particularly in the rural areas. Primary school teachers are often put on other official duties like preparation of ration cards, voters list, holding of election, etc., which leaves little time to them to devote to their primary duty of teaching. The decay in public primary education system has led to the mushrooming of private schools even in rural areas. Parents who can afford to pay prefer to send their children to these private schools, while the children of the poor households go to public schools. This is leading to the sharpening in the inequality in the quality of education being received by different social groups. Public health services are also marked by inequality in access to different social groups, the richer sections getting more than proportionate access (World Bank 2002). Public health services are also skewed in favour of the urban areas.

Recent developments within the state also confirm that public policy does matter. Since the early nineties there is an increased awareness at the national level about the problems of illiteracy and health conditions. Several programmes and initiatives have been launched to deal with these problems like the DPEP, *Sarva Shiksha Abhiyan*, health for all, etc. with enlarged funding from the Central Government and international agencies like the World Bank. These national level developments had a positive impact on the state level policy makers, which is reflected in greater concern for improvement in social sector and a substantially larger flow of public funds to these sectors, which the state could not have managed from its own

resources. These developments are indeed reflected in visible improvement in literacy levels and mortality and fertility indicators.

### **Weak Role of Civil Society**

The failure of the public policy is also reflective of the weak role of the civil society in the state. NGOs and civil society movement have been relatively weak in the state, though there have been some positive developments in this direction in the recent years. Political leadership as well as the academia in the state has also not raised the issue of social progress in a forceful manner to put public pressure on the government. Socially U.P. presents a picture of deep fissures on caste and communal lines. Political mobilization has also been along caste and communal lines rather than on economic and social issues leading to emergence of parties like BJP, SP and BSP. The state has also not witnessed social movements for promoting literacy, caste oppression or women empowerment as have been witnessed in some southern and western states. The working of the local level democratic institutions also reflects a picture of factionalism on caste line and the continued dominance of the entrenched social groups (Lieten and Srivastava, 1999).

The deep social and economic divisions based on caste, class and gender inequalities have tended to retard social progress in U.P. (Dreze and Gazdar 1996). The issue of human development in U.P. has to be viewed in this larger perspective of social change rather than in the narrow terms of increased public expenditure and creation of social infrastructure.

### **IV. Inter-District Analysis: Some Insights**

The wide variations in the level of social and economic development across the districts of the state provide us an opportunity to statistically examine some issues related to the growth and development linkages. In particular, we address three questions:

- (1) Does higher economic development leads to positive outcomes in social development?
- (2) Does provision of school infrastructure leads to higher literacy by itself? and,
- (3) What is the impact of female literacy in improving human development indicators?

The analysis has been done through computing simple zero order correlation between the selected variables across the districts. Inter-district analysis throws up some interesting insights.

Firstly, we find a significant dichotomy between the levels of economic and social development at the district level (Table 9). Education and medical health facilities show a negative association with agriculture and industrial development. Educational facilities are positively but weakly correlated with overall index of development. The correlation between educational and health facilities though positive is not very high. The economically developed districts of western region do not score particularly well in indicators of social development, while a reverse situation is found

in case of some of the poorer eastern districts (Singh 2002; Dreze and Gazdar, 1996, pp. 49-51). Thus, economic development by itself does not lead to social development, unless accompanied by a favourable social climate and strong public policy support.

Secondly, we tried to test the hypothesis that literacy levels are positively related with the availability of educational infrastructure as indicated by the number of schools per lakh population in 2001. Relevant data have been given in Appendix 1. We did not find a close correspondence between the two in case of many districts (Appendix 2). For example, Jalaun has the highest number of schools per lakh population in 2001 but the district stands 13<sup>th</sup> in terms of literacy rates. Kanpur Nagar, largely an urbanized district, has the highest literacy among U.P. districts but its rank is 25<sup>th</sup> district so far as number of schools per lakh population is concerned. On the other hand, Ghaziabad which has the lowest number of schools per one lakh population is the 3<sup>rd</sup> most literate district in the state. Again, Shrawasti has the lowest literacy rate though it ranks at 23<sup>rd</sup> position in terms of number of schools per population.

Table 9: Correlation Matrix between Factor Scores of Different Sectors  
For U.P. Districts: Mid Nineties

Sector	AGR	IND	INF	EDU	MHD	HAB	SOC	INDEX
AGR	1.0000	0.4440	-0.1804	-0.4254	-0.3729	0.3631	-0.1444	0.6451
IND	0.4440	1.0000	0.1781	-0.2169	-0.4834	-0.3960	-0.0819	0.6471
INF	-0.1804	0.1781	1.0000	0.6772	0.2657	0.6925	0.8124	0.5702
EDU	-0.4254	-0.2169	0.6772	1.0000	0.5959	0.2019	0.8198	0.2040
MHD	-0.3729	-0.4834	0.2657	0.5959	1.0000	-0.1011	0.6462	-0.0758
HAB	0.3631	-0.3960	0.6925	0.2019	-0.1011	1.0000	0.6169	0.8011
SOC	-0.1444	-0.0819	0.8124	0.8198	0.6462	0.6169	1.0000	0.5152
INDEX	0.6451	0.6471	0.5702	0.2040	-0.0758	0.8011	0.5152	1.0000

Source: Ajit Kumar Singh (2002).

AGR : Agriculture

IND : Industries

INF : Infrastructure

EDU : Educational Facilities

MHD : Medicgl and Heaitè Gasilities

HAB : Habitat Status

SOC : Social Development  
index

INDEX: Overall development

Note: All values above 0.25 are significant at 5% level and above 0.625 at 1% level.

Out of the 70 districts in the state only in case of 23 districts we find that the difference in the ranks in literacy rate and number of schools per lakh population is less than 10 showing some degree of correspondence. In as many as 20 districts the rank differences between the two variables were between 11 and 30, while in the remaining 27 districts the difference in the ranks was more than 30. Similar divergence between literacy rate and availability of schools was observed for 1991. But the divergence was not as sharp as in 2001. The coefficient of correlation between the two variables was 0.40 in 1991, but only 0.07 in 2001 (Table 10).

One plausible reason for this situation could be that during the nineties there was a supply driven expansion of educational infrastructure during DPEP and SSA.

programmes. The other reason could be that the availability of schools is reflected in higher literacy levels with a considerable time gap. However, no significant statistical association was observed between the availability of primary schools in 1991 with literacy rates in 2001 or even with increase in literacy rates (Table 10).

Table 10: Correlation Coefficients at the District Level between Literacy Rate and No. of Schools Per lakh Population

Type of School	1991	2001
Junior Basic School	0.4085	0.0742
Senior Basic School	0.5513	0.4162
Higher Secondary School	0.6013	0.6428
Industrial Training Institutes	0.4835	0.1394
Technical Institutes	0.6189	0.2076
All Schools	0.4459	-0.0401

Source: Based on Appendix 1.

This leads us to conclude that mere creation of educational facilities is not a sufficient condition for ensuring school attendance of children or improving literacy levels. A number of socio-economic factors operate on the demand side, which restrict the enrollment of children in schools. Poverty as well as social environment and cultural values make a difference. If parents do not place high value on education of children particularly the girl child and/or cannot afford to send their children to school due to poverty or need for domestic help, enrollment ratios and consequently literacy levels will remain low. The social composition of population also makes a difference. Thus, a higher proportion of Muslims, who belong to educationally backward group, in the population depresses the literacy rate at the district level. The coefficient of correlation between literacy rate and the proportion of Muslims in district population was -0.23 in 1991 and -0.28 in 2001 (Table 11). Significantly, in case of scheduled caste population no such correlation was observed. One reason could be that SC population is more evenly distributed across districts. Their literacy levels have also improved significantly over time. The correlation coefficient between total literacy and SC literacy at district level in 1991 is as high as 0.7414. Thus, even though SC population is lagging behind in literacy rates as compared to non-SC population, the literacy levels among the two groups move together. But this does not hold for the Muslim population, who continue to be educationally most deprived social group.

Table 11: Correlation Coefficients between Literacy Rates and Proportion of SC and Muslim Population at District Level

Category	1991	2001
SC Population	0.0598	0.1285
Muslim Population	-0.2311	-0.2829
SC+Muslim Population	-0.1709	-0.3088

Source: Based on Appendix 3.

Thirdly, we have examined the correlation between select indicators of women development and women discrimination at the district level. Women Development Index (WDI) has been prepared at the district level by combining the ranks of districts

in terms of literacy rates, work participation rates, infant mortality rates and child mortality rate. Similarly, a Women Discrimination Index (WDI) has been prepared by combining the ranks on the basis of differences in male-female values in the district and arranging districts in increasing order of differences. Results of analysis are shown in Table 12.

The analysis shows that greater participation of women in economic activities helps improve their status and affects positively other human development indicators. Thus, female work participation rates are found to be negatively associated with IMR and CMR. However, their association with overall development level is ambiguous as they show a negative association with WDI as well as WDI and an insignificant correlation with Overall Development Index. Male work participation rates are negatively associated with development levels and female work participation. Thus, U.P. districts seem to be on the declining part of the U shaped curve of WPR. WPR are found to be lower in more developed Western districts and higher in the poorer Eastern districts.

Table 12: Correlation Matrix between Indicators of Development and Indicators of Women Status

	WDI	WD2	WD3	WD4	WD5	WD6	WD7	WD8	DIW	WDI	INDEX
WDI	1.0000	-0.3857	-0.7394	-0.4522	0.4738	0.5353	0.5110	0.5439	0.4967	0.6156	-0.2737
WD2	-0.3857	1.0000	0.4863	0.0990	-0.2371	-0.3237	0.2935	-0.4690	-0.5578	-0.5702	0.0036
WD3	-0.7394	0.4863	1.0000	0.8175	-0.4877	-0.6038	-0.6470	-0.6449	-0.5770	-0.7498	0.4800
WD4	-0.4522	0.0990	0.8175	1.0000	-0.4348	-0.5623	-0.6445	-0.6042	-0.4737	-0.5960	0.6123
WD5	0.4738	-0.2371	-0.4877	-0.4348	1.0000	0.7219	0.6101	0.6216	0.2968	0.6058	-0.2165
WD6	0.5353	-0.3237	-0.6038	-0.5623	0.7219	1.0000	0.7952	0.8006	0.6942	0.8257	-0.3593
WD7	0.5110	0.2935	-0.6470	-0.6445	0.6101	0.7952	1.0000	0.9061	0.5177	0.7717	-0.6370
WD8	0.5439	-0.4690	-0.6449	-0.6042	0.6216	0.8006	0.9061	1.0000	0.7295	0.8546	-0.5415
DIW	0.4967	-0.5578	-0.5770	-0.4737	0.2968	0.6942	0.5177	0.7295	1.0000	0.8168	-0.2664
WDI	0.6156	-0.5702	-0.7498	-0.5960	0.6058	0.8257	0.7717	0.8546	0.8168	1.0000	-0.3962
INDEX	-0.2737	0.0036	0.4800	0.6123	-0.2165	-0.3593	-0.6370	-0.5415	-0.2664	-0.3962	1.0000

Source: Ajit Kumar Singh (2002).

WD1: Work participation rate (male)      WD2: Work participation rate (female)  
WD3: Literacy rate (male)                  WD4: Literacy rate (female)  
WD5: Infant mortality rate (male)        WD6: Infant mortality rate (female)  
WD7: Child mortality rate (male)        WD8: Child mortality rate (female)  
DIW : Women discrimination index      WDI : Women development index  
INDEX: Overall development index

Note: All values above 0.25 are significant at 5% level and above 0.625 at 1% level.

All mortality indicators are found to be significantly and positively associated with each other and negatively associated with male as well as female literacy levels. Male literacy also has a favourable impact on female literacy as well as female work participation and reduces women discrimination. Infant and child mortality indicators show a clear negative association with composite index of development at the district level. Thus, overall economic development and better infrastructure exercise a beneficial impact on health indicators.

We also observe a high correlation between WDI and DIW indicating that where women score well in terms of development indicators degree of discrimination against women is low. Composite index of development, however, shows a negative association with WDI indicating the dichotomy between economic and social development as the district level observed earlier.

The preceding analysis points out the significant instrumental role of literacy levels—both for males and females—for improving the human capabilities of the people and emancipating the women from the ill effects of relative deprivation. This underlines the need for giving highest priority to literacy and schooling in the development programmes of a state like Uttar Pradesh

## V. Economic Growth, Employment and Poverty

U.P., which has given most of the prime ministers of the country, enjoyed political stability for nearly four decades after independence. During this period the Congress party was in the seat of power for most of the time, except for some brief spells. The political and social & churnsng ÷ itnessef in time late eighties saw a number of coalition governments of various mixes and hues, all of which had a short tenure. Since December 1989 U.P. has seen change of chief ministers nine times and three spells of president rule.

Thus, U.P. is witnessing a phase of divided society, fractured polity and stagnant economy, with little hope of the end of the stalemate in near future.

We may first take a brief look at the economic performance of U.P. over the plan period (see Singh 2000b). Growth rate in SDP in U.P., which had remained extremely sluggish during the first four Five Year Plan periods, started picking up since the Fifth Plan period and caught up with the national growth rate in the Sixth and the Seventh plan period (Table 13). However, since the beginning of the nineties, coinciding with the economic reform period though not necessarily due to it, growth rate in U.P. dropped significantly and has not shown any signs of picking up in the recent years.

Table 13: Compound Annual Growth Rate of Total and Per capita Income  
In U.P. and India Since 1951

Period	CAGR of Total Income (%)		CAGR of Per Capita Income (%)	
	Uttar Pradesh	India	Uttar Pradesh	India
1951-56	2.0	3.6	0.5	1.7
1956-61	1.9	4.0	0.3	1.9
1961-66	1.6	2.2	-0.2	0.0
1966-69	0.3	4.0	-1.5	1.8
1969-74	2.3	3.3	0.4	1.1
1974-79	5.7	5.3	3.3	2.9
1981-85	3.9	4.9	1.5	2.7
1985-90	5.7	5.8	3.3	3.6
1990-92	3.1	2.5	1.1	0.4
1992-97	3.2	6.8	1.4	4.9
1997-02	3.1	5.3	1.0	3.3

Source: Plan Documents, Government of Uttar Pradesh.

The growth rate of the U.P. economy has remained markedly below that in the country as a whole resulting into even widening divergence between the national and the state per capita income. Thus, per capita income of U.P., which was almost equal to the national average at the beginning of the planning period, is now almost half of that. The post reform period has seen a sharpening divergence in the per capita income of the state and the country as a whole.

The sharp deceleration in growth rate of SDP observed since the beginning of the nineties has affected all the sectors of the state economy as can be seen from Table 14. Trend growth during the last decade was 2.0% per annum in case of primary sector, and around 4.4% in case of the secondary sector and 4.7% in case of the tertiary sector. Slow growth of the economy is coupled with wide year to year fluctuations in growth rate in all the sectors of the economy, largely emanating from the fluctuations in the agricultural out put.

Table 14: Annual Percentage Change in GSDP at Constant Prices in U.P.: 1994-2003

Year	Primary Sector	Secondary Sector	Tertiary Sector	All Sectors
1994-95	3.07	14.20	3.91	5.79
1995-96	1.94	5.68	4.25	3.69
1996-97	9.40	14.74	9.60	10.74
1997-98	-4.82	0.28	4.38	-0.09
1998-99	3.33	2.01	2.68	2.75
1999-00	8.90	0.11	5.71	5.49
2000-01	-0.67	1.15	2.84	1.14
2001-02	2.34	6.83	4.70	4.33
2002-03	-6.17	3.15	3.98	0.14
Annual Compound Growth Rates (1993-94 to 2002-03)	2.00	4.42	4.74	3.76

Source: Statistical Diary U.P., Economic and Statistics Division, State Planning Institute, Govt. of U.P.

### Plan Expenditure

The fluctuations in the SDP growth witnessed in U.P. are closely related to the level of plan expenditure in the state. Plan expenditure in U.P. as a percent of NSDP remained fairly low during the period 1951 to 1975 (Table 15). There was a quantum jump in plan expenditure levels from around 4.7 per cent of NSDP during the Fourth Plan to over 7 per cent of NSDP during the Fifth, Sixth and the Seventh Five Year Plans. During this period growth rates also picked up. However, since early nineties there has been a sharp decline in the plan expenditure as per cent of SDP, which is reflected in a sharp decline in growth rates. The ratio of plan expenditure to SDP still remains below the levels reached in the early seventies.

### Fiscal Crisis

The decline in plan expenditure in its turn can be traced to the sharp deterioration in the fiscal situation in the state witnessed since the early nineties, which is reflected in unsustainable and high levels of revenue and fiscal deficits, mounting

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debt and interest burden and increasing resort to withdrawals from the 'public account' including reserves and employees' Provident Funds (see Singh 1999 and 2000a).

Nearly all the major fiscal indicators show a continuous worsening of the situation in the state (Table 16). The proportion of non-development expenditure to total expenditure has been going up and now constitutes over 40 per cent of total expenditure and around 60 percent of total revenue receipts. The burden of interest payment has steadily increased and now accounts for over one-fourth of the revenue expenditure. The State is able to finance only 40 percent of its total expenditure from its own tax and non-tax revenue receipts, rest being financed by central transfers and borrowings. Nearly two-thirds of borrowings are being diverted to meet revenue expenditure. Revenue deficit which was around 1.5 percent of GSDP in the early 1990s has hovered around 3.5 percent level in recent years. Similarly, fiscal deficit has remained around 5-6 percent of GSDP

Table 15: Plan Expenditure in U.P.

Period	Plan Expenditure (Rs. Crores)	Plan Expenditure as per cent of NSDP
1951-56	153	2.05
1956-61	233	2.66
1961-66	561	4.53
1966-69	455	3.86
1969-74	1166	4.69
1974-79	2909	7.01
1979-85	7356	7.62
1985-90	11949	7.44
1990-92	7772	7.28
1992-97	21683	4.73
1997-98	5033	3.66
1998-99	5648	3.67
1999-00	5843	3.53
2000-01	5897	3.40
2001-02	5965	3.16
2002-03	6702	3.30
2003-04	7242	3.33
2004-05	9651	4.18

Source: Plan Documents, Government of Uttar Pradesh.

Note: Percentages from 1997-98 are in terms of GSDP.

As a result of the continued fiscal profligacy of the government the state is rapidly slipping into a debt trap (Kripa Shankar 2001 and 2002; Singh 1999 and 2000b). Liabilities of the State government have been steadily rising going up from a modest Rs. 17966 crore in 1990-91 to Rs. 72766 crore in 2001-02 and crossed the level of Rs. 1,00,000 crore in 2003-04.. Total debt of the state government is projected to touch the figure of Rs. 1,30,000 crore in 2005-06. The ratio of debt to SDP in U.P. at over 50 per cent is the highest among Indian states. Debt servicing ratio to revenue receipts is as high as 46 per cent during 2004-05. Interest payment alone now amounts to almost 30

per cent of the revenue expenditure, thereby squeezing the capacity of the state to spend on priority sectors.

The fiscal crisis has been brought about by an unabated increase in public expenditure due to the mounting pressure of non-developmental expenditure on salaries, pensions and interest payment. The government budget has been running into unabated high revenue deficit. Due to the continued fiscal crisis the state government is not in a position to raise its expenditure on development plans and other priority sectors like education, health and infrastructure.

A disconcerting part of the fiscal scenario is that a large part of the borrowing is being diverted to meet the current revenue expenditure rather than for building productive capacity of the state. Revenue deficit accounts for nearly two-thirds of the fiscal deficit in U.P. The uncontrolled growth of revenue expenditure is cutting into the capital expenditure of the state government, which has hovered at a pitiable level of around 5-6 per cent of total expenditure for last several years. Declining public investment, in its turn, has been adversely affecting the growth rate of the State's economy.

Faced with the deepening fiscal crisis and mounting debts, the U.P. Government adopted a FRBM Act in 2004, becoming the fifth state in the country to do so. The Act provided that the Medium Term Fiscal Restructuring Policy shall set forth a five-year rolling targets for the prescribed fiscal indicators with specification of underlying assumptions. The following specific targets have been laid down in the Act: (a) reduction of the revenue deficit to nil within a period of five financial years beginning from the 1<sup>st</sup> day of April 2004 and ending on the 31<sup>st</sup> day of March 2009; (b) reduction of fiscal deficit to not more than three per cent of the estimated Gross State Domestic Product by 31<sup>st</sup> day of March 2009; and, (c) reduction in total liabilities of the government to twenty-five percent of estimated gross state domestic product within a period of fourteen financial years, beginning from the initial financial year on the 1<sup>st</sup> day of April, 2004, and ending on the 31<sup>st</sup> day of March 2018.

### **Employment Structure and Growth**

Agriculture remains the predominant sector of the state economy with around two-third workers engaged in the sector as per 2001 Census. The process of sectoral shift has been slow. The proportion of agricultural workers to total workers declined marginally during the eighties—from 75.29% in 1981 to 73.66% in 1991 (Table 17). But during the nineties the pace of shift accelerated and the proportion of agriculture declined to 65.6%, that is, by 8.06 percentage point as compared to a decline of only 1.63 percentage point during the eighties. The proportion of agricultural labourers in total work force has been steadily going up rising from 16.73% in 1981 to 20.36% in 1991 and further to 24.19% in 2001. However, much of the diversification is a distress phenomenon reflected in the high employment growth in the informal sector. Organised sector employment is hardly around 6% of total employment. Moreover, organized sector employment in absolute terms has remained almost static since 1991. Private sector organized employment has remained unchanged since 1971.

Employment growth in the state has been fairly satisfactory. Workforce increased at a CAGR of 2.78% during 1981-91 and at a CAGR of 2.50% during 1991-2001 against the national average growth rate of 2.52% and 2.53% respectively during the two decades (Table 18). However, during the latter decade main workers remained almost static, while the marginal workers show an annual increase of 16.28%. Thus, the quality of employment shows deterioration in as much as the new jobs provide only short period employment.

Table 16: Select Fiscal Indicators for Uttar Pradesh

Indicators	1990-95	1999-00	2000-01	2001-02	2002-03	2003-04
	Average	Accounts	Accounts	Accounts	R.F.	B.E.
Revenue Deficit/Gross Fiscal Deficit	34.2	65.3	61.8	62.4	60.55	37.30
Capital Outlay/ Gross Fiscal Deficit	30.3	22.8	31.1	34.0	33.57	59.28
Net Lending/Gross Fiscal Deficit	35.5	11.8	6.1	3.6	5.88	3.43
Non-Development Expenditure/ Aggregate Disbursement	31.3	39.0	41.6	39.9	41.4	36.5
Non-Development Revenue Expenditure/ Revenue Receipts	44.3	62.6	61.3	60.5	63.8	64.1
Interest Payment/ Revenue Expenditure	16.4	22.8	24.0	25.1	26.5	27.0
State's Tax Revenue/ Revenue Expenditure	32.0	32.7	35.4	32.4	33.2	35.7
State's Non Tax Rev./ Revenue Expenditure	11.0	7.0	6.3	4.6	4.7	4.3
Gross Transfers/ Aggregate Disbursement	50.8	38.9	39.1	41.7	40.4	35.6
Debt Servicing/ Gross Transfers	17.7	35.8	35.4	30.1	37.4	44.6

Source: Reserve Bank of India, State Finances - A Study of Budgets of 2003-04, RBI Bulletin, Feb.2004.

Table 17: Percent Distribution of Total Workers (Main + Marginal) by Industrial Category: 1981, 1991 and 2001

State	Cultivators	Agricultural Labour	Agricultural Workers	Household Industry	Others	Total Workers
<b>India</b>						
1981	42.04	26.33	68.38	3.50	28.12	100.00
1991	39.72	27.43	67.15	3.55	29.30	100.00
2001	31.71	26.69	58.40	4.07	37.52	100.00
<b>Uttar Pradesh</b>						
1981	58.57	16.73	75.29	3.74	20.97	100.00
1991	53.30	20.36	73.66	4.20	22.14	100.00
2001	41.41	24.19	65.60	5.16	29.25	100.00

Source: Calculated from Census Reports.

Table 18: Annual Compound Growth Rate of Main, Marginal and Total Workers:  
1981-91 and 1991-01 (Percent)

State	1981-1991			1991-2001		
	Main Workers	Marginal Workers	Total Workers	Main Workers	Marginal Workers	Total Workers
India	2.52	2.47	2.52	0.93	12.22	2.53
Uttar Pradesh	2.47	7.59	2.78	0.10	16.28	2.50

Source : Calculated from Census Reports.

NSS surveys reveal that casualisation of work force is on the increase. Casual labourers constituted only 10.7% of workers in 1973-74, but their proportion swelled to 20.0% by 1999-00 (Table 19). On the other hand, the proportion of self employed workers has been steadily going down. The proportion of self employed workers was 76.8% in 1972-73 but came down to 69.4% in 1999-00. The proportion of regular wage/salary earners also showed a steady decline till 1993-94, coming down from 12.5% in 1973-74 to 8.8% in 1993-94. But the proportion again increased to 10.6% in 1999-00.

Table 19: Per Cent Distribution of Workers by Type of Employment in U.P.

Type of Employment	27 <sup>th</sup> Round 1973-74	32 <sup>nd</sup> Round 1977-78	43 <sup>rd</sup> Round 1987-88	50 <sup>th</sup> Round 1993-94	55 <sup>th</sup> Round 1999-00
Self Employed	76.8	73.3	71.8	71.6	69.4
Regular Wage/Salary Earners	12.5	9.7	9.8	8.8	10.6
Casual Labourers	10.7	17.0	18.4	19.6	20.0
All Workers	100.0	100.0	100.0	100.0	100.0

Source : NSS Reports

## Unemployment

Open unemployment rates in U.P. are relatively low. Only 1.2 percent of the rural labour force and 4.5 percent of the urban labour force was unemployed in U.P. in 1999-00 according to the usual status as compared to the All-India figures of 1.9 percent and 5.2 percent respectively (Table 20).

As per daily status definition, which also takes account of under-employment, unemployment rates were higher-3.6 percent of rural labour force and 6.2 percent of the urban labour force against the All-India figures of 7.1 % and 7.7 % respectively.

Unemployment is significantly higher among the educated and among women. For instance, 7.1 percent of educated rural females and 17.2 percent of urban females (age 15 and above) were unemployed according to usual principal status in U.P. in 1999-2000. But the educated unemployment rates are lower in U.P. as compared to the national level.

The problem of open unemployment among youth has emerged as an important problem in the urban areas. Thus, 9.3 percent of urban youth were chronically unemployed in U.P. in 1999-00 on usual status basis, while only 2.0 per cent of rural youth are in this category. Similarly 11.1 and 12.5 per cent of the youth in the labour force in the urban areas are unemployed on the basis of current weekly and daily status

respectively, while 4 per cent and 6.1 per cent respectively of rural youth are in this category. Highest unemployment rates are found in the age group 20 to 24 years.

Table 20: Recent Trends in Unemployment Rates in U.P.

NSS Round	Year	Rural Areas			Urban Areas		
		Usual Status	Weekly Status	Daily Status	Usual Status	Weekly Status	Daily Status
Males							
38 <sup>th</sup> Round	1983	1.3	2.0	3.7	4.5	5.3	7.4
43 <sup>rd</sup> Round	1987-88	1.8	2.8	3.0	3.4	4.4	5.2
50 <sup>th</sup> Round	1993-94	1.2	2.0	2.9	3.6	4.2	4.8
Females							
38 <sup>th</sup> Round	1983	0.1	1.4	2.5	3.6	3.5	5.6
43 <sup>rd</sup> Round	1987-88	1.2	1.3	3.3	2.9	2.8	2.9
50 <sup>th</sup> Round	1993-94	0.4	4.8	3.9	1.6	5.5	4.8
Persons							
38 <sup>th</sup> Round	1983	1.1	1.9	3.4	4.5	5.1	7.2
43 <sup>rd</sup> Round	1987-88	1.4	2.4	3.2	3.3	4.3	5.0
50 <sup>th</sup> Round	1993-94	1.1	2.6	3.1	3.4	4.4	4.8
55 <sup>th</sup> Round	1999-00	1.2		3.6	4.5		6.2

Note : Estimates of Unemployment on Daily Status are in terms of person years.

Source : National Sample Survey (Various Rounds)

## Poverty Trends

Uttar Pradesh belongs to the category of high poverty states. Nearly 6.0 crore persons are living in poverty in U.P., perhaps the largest concentration of the poor anywhere in the world. One striking feature of poverty in the state has been that urban poverty ratios have remained above the rural poverty ratio except in 1993-94, though the majority of the poor live in the rural areas. Poverty is much higher among the landless, among scheduled castes and tribes, among the illiterate and among casual labourers. The incidence of poverty is significantly high among agricultural labourers.

Table 21: Poverty Ratio and Number of Persons below Poverty Line in U.P.

Year	Rural		Urban		Combined	
	Poverty Ratio (%)	No. of Poor (Lakhs)	Poverty Ratio (%)	No. of Poor (Lakhs)	Poverty Ratio (%)	No. of Poor (Lakhs)
1973-74	56.5	450.0	59.5	84.9	57.0	534.8
1977-78	47.6	407.4	57.1	98.4	49.2	505.8
1983-84	46.5	442.8	50.3	114.8	47.2	557.5
1987-88	41.1	412.0	45.2	125.0	43.0	537.1
1993-94	42.3	496.2	35.4	108.3	40.9	604.5

Source : Perspective Planning Division, Planning Commission, *Report of the Expert Group on Estimation of Proportion and Number of Poor*, Government of India, New Delhi, 1993, and Planning Commission, *Ninth Five Year Plan, 1998-2003*, New Delhi.

Though there has been a steady and sizeable decline in poverty ratio in U.P. both in the rural and the urban areas, the fact remains that the number of persons below the poverty line in this state remained above 5.0 crore throughout the period between 1973-74 and 1999-2000. Around one-fourth of India's poor live in Uttar Pradesh. This gives an idea of the size of the problem of poverty in the State and its chronic nature and the weaknesses and imperfections in the programmes implemented in this period for removal of poverty in the State.

There are wide variations in the level of poverty across UP's regions as can be seen from Tables 22 and 23.

Table 22: Poverty in UP's Regions, 1993-94

Region/ Sector	Poverty Ratio	Depth of Poverty (Poverty Gap Ratio)	Intensity of Poverty (Squared Poverty Gap)	Share of Poor (%)	Contribution to Total Poverty
<b>Rural</b>					
Himalayan	25.0	17.2	1.1	3.5	1.8
Western	29.6	20.4	1.8	22.3	16.7
Central	50.2	27.3	4.9	19.7	23.6
Eastern	48.6	24.5	4.0	47.1	47.0
Southern	66.7	30.2	8.0	7.5	10.9
Total	42.3	24.4	3.5	100.0	100.0
<b>Urban</b>					
Himalayan	17.5	18.1	0.9	4.1	2.3
Western	31.0	24.7	2.7	39.9	39.1
Central	34.9	27.0	3.5	21.0	23.5
Eastern	38.6	24.0	3.1	24.1	21.7
Southern	72.5	28.8	7.9	10.9	13.4
Total	35.3	25.3	3.2	100.0	100.0

Source: Dutta and Sharma, 2000

Table 23: Incidence of Poverty in Regions of UP in 1999-00

Region	Urban		Rural		Overall
	Official	Corrected	Official	Corrected	
Himalayan	14.1	19.7	15.6	18.1	15.2
Western	30.0	30.5	21.7	22.5	23.9
Central	33.4	30.0	42.2	43.0	39.7
Eastern	31.1	33.7	36.4	40.3	35.9
Southern	40.9	38.1	20.9	38.1	34.4
Uttar Pradesh	30.7	30.4	31.1	33.7	31.0

Source: World Bank 2002, p. 35

Note: Corrected figures refer to model based projections of poverty in 1999-00

In 1993-94, the Southern region (Bundelkhand) had the highest level of poverty – more than two-and-a-half time the level in the Himalayan region (now Uttaranchal)

for rural areas, and more than four times higher than the Himalayan region in urban areas (Table 22). In general, the Hill and Western regions show much lower levels of poverty, while the Southern region (Bundelkhand) has the highest level of poverty. Both the official and 'corrected' results show that the level of rural poverty in the Bundelkhand region had dropped to a lower level compared to the Central and Eastern region (Table 23).

Having looked at the economic situation in the state, we now proceed to discuss the specific issues related to the education and health dimensions of human development.

## VI. Education

### Literacy Levels

Education status of the people of U.P. is far from satisfactory. UP had a total literacy rate of 57.36% in 2001 as compared to the national average of 65.38%. The male literacy at 70.23% was far ahead of female literacy, which stood at a dismal 42.98%. The percentage of literacy differs widely between rural and urban areas. This is true both for males and the females (Table 24). Regional level differences in literacy level are not marked. All the regions of the state have registered a very sharp jump in literacy rate of over 15 percentage points between 1991 and 2001.

Table 24: Literacy in UP by Sex and Region in UP 1991 and 2001 (%)

Area	1991			2001		
	Persons	Male	Female	Persons	Male	Female
Total	41.60	55.73	25.31	57.36	70.23	42.98
Rural	36.66	52.05	19.02	53.63	67.96	37.69
Urban	61.00	69.98	50.38	70.80	78.32	62.23

Source: Census of India 1991 and 2001.

### Educational Profile

Table 25 shows the changing educational profile of population in U.P. based on NSS data. There has been a clear and steady improvement in the education profile of population over time particularly in the nineties. However, there is still a long way to go for achieving total literacy and educational empowerment of the people in the state. The contrast between male educational profile and female education profile is particularly sharp. Still 64.5% of rural females and 38.6% of urban females are illiterate in the state. Hardly 30% of males and 15% of females in U.P. have received education beyond the primary level. The corresponding figures for the rural areas are 27.5% and 10% respectively.

### Age Specific School Participation

According to the National Family and Health Survey 1998-99 only 77.3% of boys and 61.4% of girls in the age group of 6-17 years were attending school in U.P. The proportion of school going children was lower than the national average in all categories except in the case of rural males (Table 26). In the rural areas only 57.3%

girls were attending schools as compared to the figure of 77.3% for boys. In the urban areas the proportion of school going children was same for boys and girls-around 77%.

Table 25: Changing Education Profile of Population in U.P. Aged 5 & Above (%)

Area		Illiterate	Literate Primary	Middle	Secondary & Higher Secondary	Graduate & above	All Literate
		Male					
RURAL	1983	53.7	31.4	8.9	4.9	1.2	46.3
	1987-88	49.5	31.9	10.4	6.6	1.7	50.5
	1993-94	42.2	34.3	12.1	9.3	2.1	57.8
	1999-00	36.2	36.4	13.9	10.7	2.9	63.8
URBAN	1983	31.5	34.1	13.3	13.6	7.5	68.5
	1987-88	31.1	33.6	12.4	15.0	7.9	68.9
	1993-94	24.2	35.1	12.7	17.3	10.5	75.8
	1999-00	23.3	34.1	14.1	18.0	10.5	76.7
TOTAL	1983	49.6	31.9	9.7	6.5	2.3	50.4
	1987-88	46.1	32.2	10.7	8.1	2.8	53.9
	1993-94	38.6	34.5	12.2	10.9	3.8	61.4
	1999-00	33.4	35.9	13.9	12.2	4.5	66.6
		Female					
RURAL	1983	83.9	13.4	1.7	0.8	0.2	16.1
	1987-88	80.2	15.5	2.6	1.3	0.3	19.8
	1993-94	73.2	19.9	3.9	2.5	0.4	26.8
	1999-00	64.7	25.2	5.4	4.0	0.6	35.3
URBAN	1983	53.4	28.0	7.0	7.5	4.0	46.6
	1987-88	51.0	27.6	7.5	8.9	5.1	49.0
	1993-94	43.1	29.2	9.1	12.4	6.2	56.9
	1999-00	38.6	31.7	9.0	13.4	7.3	61.4
TOTAL	1983	78.5	16.1	2.6	2.0	0.9	21.5
	1987-88	75.0	17.7	3.5	2.7	1.1	25.0
	1993-94	67.3	21.8	5.0	4.4	1.5	32.7
	1999-00	59.4	26.6	6.2	5.9	2.0	40.6

Source: Calculated from household level data from NSS.

### Reasons for Children Not Attending School

Table 27 shows the main reasons for not currently attending schools in the rural and urban areas of U.P. The most important reason for not going to school was 'not interested in studies'. This reflects poor quality of teaching and infrastructure in the schools as well the inappropriate content of curriculum. The second most important reason given was 'required for household work.' The high cost of schooling also prevented children from attending school. Thus poverty and burden of sharing domestic responsibilities in case of working parents are preventing children from poor families from attending school. In rural areas a good number of girls are unable to attend school due to its distant location.

Table 26: Percent of Household Population Age 6-17 Years Attending School By Sex And Residence In UP And India

Category	UP	India
<b>Male:</b>		
Urban	77.7	83.0
Rural	77.3	75.8
Total	77.3	77.6
<b>Female:</b>		
Urban	77.0	80.0
Rural	57.3	61.7
Total	61.4	66.2
<b>Persons</b>		
Urban	77.3	81.5
Rural	68.0	69.0
Total	69.9	72.1

Source: NFHS, 1998-99

Table 27: Reasons for Not Currently Attending School

Reason	Urban		Rural		Total	
	Male	Female	Male	Female	Male	Female
School too far away	0.0	0.8	1.0	10.5	0.8	8.9
Transport not available	0.2	0.9	0.0	2.5	0.1	2.2
Education not considered necessary	2.9	5.7	2.9	7.5	2.9	7.2
Required for household work	12.5	11.5	11.7	15.3	11.9	14.7
Required for work on farm/family business	3.0	0.0	5.1	0.7	4.6	0.6
Required for outside work for payment in cash or kind	5.5	0.9	3.7	0.3	4.1	0.4
Costs too much	16.0	28.1	15.1	7.7	15.4	11.0
No proper school facilities for girls	0.0	1.2	0.0	6.8	0.0	5.9
Required for care of siblings	0.7	1.9	1.2	1.2	1.1	1.3
Not interested in studies	46.7	30.9	44.3	23.8	44.9	25.0
Repeated failures	0.2	0.4	0.6	0.2	0.5	0.2
Got married	0.0	4.4	0.0	5.1	0.0	5.0
Other	7.7	10.4	8.6	10.4	8.3	10.4
Don't Know/missing	4.5	2.9	5.9	8.1	5.5	7.3
Total percent	100.0	100.0	100.0	100.0	100.0	100.0
Number of children	208	130	587	688	795	818

Source: National Health and Family Survey, 1998-99.

## Educational Infrastructure

Given the large size of the population in the state primary and secondary education is a very big public enterprise in UP. The details of the educational system in U.P. are presented in Table 28. In 2004-05, there were 1,29,976 lower primary, 36,874

upper primary and 12,766 secondary schools in the state. Around 5 lakh teachers were employed in these schools. The ratio of female teachers to total teachers was around 40% at the primary level but only 21.6% at the secondary level. The number of students on rolls in schools was 261.38 lakhs, 93.29 lakhs and 67.64 lakhs at the three levels respectively. Ratio of girls to total students was 47.0% at lower primary and 44.0% at upper primary state, but much lower at 29.6% at the secondary school level. This indicates the discrimination against the female child and lower valuation on the education of the girl child in the state.

Table 28: School Education in U.P. at a Glance: 2004-05

Number & Percentages	Lower Primary Education	Upper Primary Education	Secondary Education
Number of schools	129976	36874	12,766
Ratio of Girls schools	all co-ed	15.0	20.7
Number of Teachers	283287	84125	1,37,902
Ratio of female teachers (%)	40.0	40.1	21.6
Number of students	26138390	9329430	67,64,358
Ratio of girls (%)	47.0	43.9	29.6

Source: Shiksha ki Pragati, Directorate of Education, U.P.

There are 53 junior basic schools and 12 senior basic schools per lakh of population in U.P. (Table 29). The teacher-pupil ratio is 43 and 30 at the two levels respectively. In terms of the number of schools per lakh of population sparsely populated Bundelkhand is the most developed region of the state and the more populous Eastern region the least developed. The teacher pupil ratio also reveals a similar picture.

Table 29: Region Wise Variation in Literacy and Educational Infrastructure

Indicator of development	Eastern	Western	Central	Bundel khand	UP
Literacy percentage					
1991	38.60	42.00	42.60	42.30	40.70
2001	55.22	58.44	59.04	60.32	57.36
No. of Schools per lakh of population (1999-2000)					
(a) Junior Basic School	49	53	60	70	53
(b) Senior Basic School	11	12	13	19	12
Teacher pupil ratio (1999-2000)					
(a) Junior Basic School	44	42	43	39	43
(b) Senior Basic School	31	32	27	24	30

Source: Shiksha ki Pragati, Directorate of Education, U.P.

## Increase in Enrollment of Students

The state has shown remarkable achievement in term of enrolment in primary and upper primary, girls' enrolment, drop out rate and pupil teacher ratio in the last decade (Tables 30, 31 and 32). The state has shown remarkable achievement in term of enrolment in primary and upper primary, girls' enrolment, drop out rate and pupil teacher ration during 9<sup>th</sup> and first two years of 10th Five Year Plan. Enrolment in primary school has increased from 184 lakh to 218 lakhs during 9<sup>th</sup> plan. Similarly, the enrolment at upper primary level has increased from 64.3 lakhs to 82.9 lakhs during the same period. Girls' enrolment has increased from 76.5 lakh to 98.1 lakh in the 10<sup>th</sup> Plan. An important achievement is the reduction of drop out ratio from 50 percent in 1992 to 30 percent in 2001 at the primary level and from 65 percent to 45 percent for upper primary during the same period. Girls drop out ratio has declined from 60 percent in 1992 to 34 percent in 2001 in the primary level (Tenth Plan, U.P. Government).

Another important achievement has been the reduction in drop out ratio from 50 percent in 1992 to 30 percent in 2001 at the primary level and from 65 percent to 45 percent for upper primary level. Girls' drop out ratio has declined from 60 percent in 1992 to 34 percent in 2001 at the primary level (Tenth Plan, U.P. Government).

Table 30: Growth of Enrolment in Junior Basic Schools (Nos.)

Year	Boys	Girls	Total
1970-71	6748031	3867691	10615722
1980-81	6593572	2774829	9368401
1990-91	7893063	4068501	11961564
2000-01	8076496	4478442	12554938
2004-05	16773000	6034000	22807000

Source: *Shiksha ki Pragati*, Directorate of Education, U.P.

Table 31: Growth of Enrolment in Senior Basic Schools (Nos.)

Year	Boys	Girls	Total
1970-71	1095740	285166	1380906
1980-81	1412783	391731	1804514
1990-91	2026314	721254	2747568
2000-01	2028155	910505	2938660
2004-05	4403000	3295000	7698000

Source: *Shiksha ki Pragati*, Directorate of Education, U.P.

There are several reasons for increase in the enrolments especially at the secondary level:

- There is visible increase in the demand for secondary education as is evident by large number of students applying for admission in secondary schools. The less meritorious who fail to secure admission appear as private candidates in the Board examination.

- Various types of concessions and attractions are given to girls in secondary schools, which attracts more female students particularly from the disadvantaged groups.
- Provision of scholarships to SC/ST students enables them to join schools.
- Special provisions to minority students help in raising the demand for education in the Urdu speaking community.
- Modern attractions in urban areas, for example availability of computer science as a subject at the secondary stage, result in increased demand for secondary level of education.
- Increasing enrolment ratio at the upper primary or senior basic stage is another important reason due to which there is an influx of students in the secondary schools.
- Increasing social value of education in the mind of parents for various reasons particularly awakening and for the girl child motivates the demand for education to rise.

Table 32: Growth of Enrolment In Secondary Schools (Nos.)

Year	Boys	Girls	Total
1970-71	1851759	463877	2315736
1980-81	2752494	695829	3448323
1990-91	3614474	1145932	4760406
2000-01	3749491	1572239	5321830
2004-05	4760256	2004102	6764358

Source: *Shiksha ki Pragati*, Directorate of Education, U.P.

### Educational Policy in Five Year Plans

In the state of UP as in the country, the education policy has been guided by some important national level Committees and Commissions reports. The Sixth Plan (1980-85) accorded highest priority to universalisation of elementary education but no less significant was the policy with regard to secondary education in the state. In order to check uncontrolled development of uneconomic and sub-standard secondary schools, the state government proposed to restrict opening of new secondary schools in both government and private sector. Vocationalisation of secondary education was emphasized in the context of the new policy of vocationalising secondary education at the national level.

In view of the growing demand for secondary education the Seventh Plan of the state emphasized opening of new secondary schools along with improvement in quality. Vocationalisation was accepted as an integral component of the plus two stage of education. The plan policy emphasized strengthening the government secondary schools. Consolidation and strengthening of the existing institutions was also stressed.

The Eighth Five Year Plan (1992-97) of UP recognized secondary education as one of the most important and effective instruments of human resource development.

The policy emphasized reduction in drop out rates, improvement in formal and non formal system of education and expansion in the facilities for girls education, expansion and improvement in science education, consolidation and qualitative improvement in secondary education. The policy also aimed at extending the scheme of vocationalisation of education under the central government scheme launched towards the end of the Seventh Plan.

The Ninth Five Year (1997-2002) Plan policy in the field of secondary education in UP emphasized the need for modification and diversification of curricula so as to provide skill and training through well structured vocational courses, planned with community involvement and support. It also aimed at encouraging the Open Learning System (OLS) for providing education to those who could not seek formal education through full time secondary educational institutions.

The Tenth Five-Year Plan (2002-07) policy recognizes secondary education as the springboard to higher education. It also admits that it is a terminal stage in the general education system. At this stage of education, the Tenth Plan says, the youth decides on whether to pursue higher education or opt for technical training or join the work force. Thus, the secondary education becomes more important as the future of young people depends upon choosing the right direction as per their aptitude and expectations.

The Tenth Five Year Plan of UP aims at promoting the participation of private entrepreneurs in establishing, expanding and upgrading educational institutions, as the demand for this level of education is increasing very fast. The UP government is hopeful that the policy of encouraging private partnership in education will help improve the position of the supply of education in the state. It is also likely to bring about qualitative improvement through induced competition.

### **Special Programmes of Educational Development**

The special educational programmes at the secondary stage in UP have been launched in the state to promote educational development of the deprived sections of society including the following social groups: (A) Scheduled caste students, (B) Scheduled Tribe students, (C) Minority Students, (D) Girls in general, (E) Rural-Urban Poor students, and (F) Education of the handicapped children. The following are the important concessions given to the special category of students:

- Full free ships to SC/ST students in school education.
- Provision of free ships and half free ships on merit cum means basis to students from poor families in rural and urban areas.
- Provision of Urdu teachers to retain/increase Muslim children enrollments.
- Provision of Poor Boys' Fund from which lump sum grant is given to very poor deserving students.
- Various types of scholarships for different categories of students like SC/ST students, minorities, the other backward classes and the handicapped children.

- Provision of loan scholarships to students to support their studies and return the loan when they start earning.
  - Free-ships to female students both in rural and urban areas up to class XII. In February 2004 this scheme was extended to degree classes as well.
- Many of these are central schemes, while some have been launched by the UP government.

### **Educational Schemes for SC/ST**

In view of the constitutional provisions for protection and promotion of the interests of weaker sections of the society, a number of special educational programmes and institutions have been started for the SC/ST students. These include Ashram Type Schools which have residential facilities for education and Hostels and IAS/PCS Coaching Centres for SC and ST students. High priority has been assigned for the distribution of scholarships. The scholarships are provided at the rate of Rs 25 per student per month from class I to V, Rs. 40 from class VI to VIII and Rs. 60 for classes IX and X. Children of these groups are also provided non-recurring assistance for purchase of books and reimbursement of fees.

### **Education Programmes for Minorities**

Minorities are educationally backward group (see Box 3). In accordance with the provisions of Indian constitution and the U.P. Minority Commission Act 1994, the State Government has notified Muslim, Sikh, Buddhist, Christian and Parsee communities as Minority Communities.

In 21 districts of U.P. more than 20 percent of population belongs to minority category. These districts have been declared densely minority populated districts and the 75 Development Blocks have been declared as Educationally Backward Minorities Blocks. The State Government provides various types of educational facilities to minorities particularly in the identified areas.

Through the implementation of the schemes like Minorities Scholarship Programme, Madarsa Modernisation Scheme, Hostel and Building Construction Scheme, Margin Money and Term loan scheme etc. efforts are being made to integrate the educational and economic development programmes for the minorities. The ultimate aim is to bring about a qualitative improvement in their social, educational and economic status. Since the inception of these schemes, 735 Madarsas have been modernized and 317 Madarsas have been brought under the grant-in-aid-list so as to facilitate them to provide salary to their teachers. Children belonging to minorities are being given financial assistance while they are in schools. Provision has been made for scholarship from class one to class tenth.

### **Promotion of Urdu**

For the promotion of the teaching of Urdu language, the programme of school education of Urdu language in the state was started in 1989 the year when the government of UP declared Urdu as the second official language in the state. The

objective of the programme is to make education available through the mother tongue to the children of minorities whose language is mostly Urdu. This scheme makes a provision for the appointment of one Urdu teacher in a school if there are a minimum of ten students reading Urdu in a class or a minimum of 40 Urdu medium students in the school. Arrangements have been made for training of Urdu teachers.

### BOX 3

#### Minorities Education: A Case Study in Pilibhit District

*A field study of educational status of minorities in Pilibhit district throws light on their educational backwardness. Muslims comprise around 21% population of the districts, while Sikhs constitute around 4%. About 70.5% of Muslim population and 4% of Sikh population lives in rural areas of the district. The educational backwardness of Muslims is evident from the fact that 52.47% of Muslims are illiterate while among Sikhs only 32.81% are found illiterate. Educational backwardness persists more among Muslims than among Sikhs through out the educational ladder-primary to graduation level. Only one-third of the Muslims have received education, mostly upto the primary level. Less than half percent of Muslims received education upto graduate level or above as compared to 3.8% of Sikhs (See Table below).*

#### Educational Status of Muslims and Sikhs in Pilibhit District (Percent of Population)

Educational Category	Muslims	Sikhs
Illiterate	52.47	32.81
With Primary education	23.16	29.71
Middle Education	7.63	13.47
High Schools education	2.14	10.19
Intermediate	0.66	2.76
Graduates & Above	0.38	3.28
Professional courses	0.11	0.53

Source: Field Survey by Mohd. Muzammil.

#### Promotion of Girl's Education

Girls are another deprived section of the society. They have suffered in every field and more so in the field of education and especially among minorities. Girls enrolment as well as their retention at all stages of school education is poor in comparison to boys while their performance in the Board examinations is better than that of boys.

State government has made special efforts particularly in the last decade to promote girls' education including the following:

- Education has been made free for girls up to XII standard and very recently up to university level.
- Fifty per cent of the new upper primary schools are being established exclusively for girls.

- Seventy per cent of the seats in pre-service training institutions for primary school teachers have been reserved for girls so as to make way to recruit more women teachers at the primary level.
- In 488 un-served blocks, the state government has opened 100 high schools from its own resources. It has also proposed to open 100 girls High Schools/Inter colleges with the help of voluntary agencies, who are given a grant of Rs. 10 lakhs for the building, furniture, etc. and 5 acres of land for each school in un-served blocks.
- All the non-formal education centres have been designated as girls education centres so as to bring more and more girls in the centres and cater to their educational needs; and
- The state government has adopted schemes of incentive grants viz., sanitary facility, classrooms and furniture to the boys' institutions in which girls are also studying.

### **Policy for Partially Handicapped**

Integrated secondary education scheme has been launched for the handicapped children of various categories, i.e., children with various degrees of deafness, weak eyesight and physically and mentally handicapped children. This scheme was started in 1986-87 to encourage the partially handicapped children for pursuing education by giving them financial assistance. This scheme is a centrally sponsored scheme and the Central government bears the burden of its financing.

Under this scheme financial assistance is given to the handicapped students at the rate of Rs. 200 uniform allowance, Rs. 400 for books and stationery and Rs. 50 for conveyance. A grant of Rs. 2000 is also given on medical recommendation for purchase of equipment for the handicapped child. This scheme is under implementation in upper primary education and secondary education in the following districts: Meerut, Agra, Bareilly, Lucknow, Gorakhpur, Faizabad, Jhansi, Moradabad, and Ballia.

### **Policy for Up-Gradation and New Schools**

In order to improve access to secondary school education, the state has been following the policy of up-gradation of upper primary level institutions and establishing new secondary level schools by assessing the demands of a particular area or pocket of habitations. The U.P. Board of Secondary Education has prescribed certain norms in this regard. The up-gradation of aided upper primary schools of the category called "aided" follows a procedure laid down by the Board.

A similar practice is being followed for the up-gradation of the institution from high school level to intermediate standard, which requires that the result of high school on an average should not be less than 40 percent. The conditions for up-gradation in respect of students enrolment, library, teaching aids, science equipments, computer etc are laid down very clearly. The entire process of approval of a new institutions/ up-gradation is further subjected to the scrutiny by an inspectorial team.

### **The System of Grants-in Aid**

Budgetary grants to private aided schools account for a very substantial proportion of the education budget - about 70 percent and 80 percent of the higher and

secondary education budgets in UP respectively but, at present, they are largely devoid of performance conditions or incentives. How and what incentives can be built into grants is an area that deserves detailed study. Such research could be based on an examination of the alternative grant structures in other countries.

A grant structure needs to be evolved which relates grant levels to various school performance indicators such as percentage of total expenses spent on non-salary costs (to encourage quality improvements), percentage of total funds raised from non-fee sources such as parental donations (to encourage equitable resource-generation), percentage of parents who are satisfied with the school (to encourage accountability), and average number of students per class (to encourage cost-consciousness), etc. A more rational grant structure could be a policy correction that has potentially the biggest pay-off in terms of improved cost-efficiency in education.

### **Outlook for Future**

Gradually the system of education in UP is moving from state controlled and state financed to privately managed and privately funded system, however the role of the state still remains massive. An increase in fee is bound to occur in the days to come and soon the system of "free education" is to be replaced by "user charging education system". For making the so called free system of school education to fee charging one, a political consensus is necessary, without which it would not be possible to raise or impose fee successfully in UP where democratic norms are most deep rooted. However, along with making the system more fee charging, adequate provision will have to be made for free-ships to poor students lest they are deprived of school education.

## **VII. Health**

### **Health Policy under Plans**

Health has been incorporated as an important ingredient of human development since 1990 and the life expectancy at birth is used as the proxy for health. The public health system of UP is deeply influenced by the World Bank and the UNDP policy frame for this sector. Their involvement of these agencies in the health care in the state of UP has been very significant in many ways.

With the launching of the Five Year Plans in the country, the development of the health sector came to be governed by the plan priorities as set out in the national and state plan documents. During the First Five Year Plan (1951-56) in 1951 BCG vaccination campaign was launched and the National Family Planning Program was started. Malaria Control Program also began at about the same time. During the Second Plan (1956-61) the Malaria Eradication Program was launched in 1958. National Small Pox Eradication Program was launched in 1962. A separate Department of Family Planning was created, which was changed as Family Welfare Department in 1977. The Third Plan (1961-66) emphasized on social sectors. In the Fourth Plan (1969-74) Central Birth and Death Registration Act was passed and in 1972 Medical Termination of Pregnancy (MTP) Act was legislated. It was in the Fifth Plan (1974-79) that India was declared a small pox free nation. In 1976 New Population Policy was announced

and in 1978 Alma Ata Declaration was signed setting certain health goals and the required budgetary provisions.

Under the Sixth Plan (1980-85), the National Health Policy was announced in 1983 having far reaching financial implications for the medical and health care financing. Under the Seventh Plan (1985-90), the Universal Immunization Program was launched in 1985 and in the Ministry of Human Resource Development (HRD), a separate Department of Women and Child Development was created. In 1987 AIDS Control Program was started. It was during the Eighth Plan (1992-97) that Family Planning was made target free in 1996. The Ninth Plan (1997-02) paved the way for private sector participation in health care in a big way and announced that the role of the government will be that of a facilitator. The Tenth Plan (2002-07) has rightfully taken up the cause of social justice by providing medical and health care to the poorer people of the society. Recently a National Health Mission has been launched.

### **Health Expenditure**

Since the beginning of the reform program there has been a remarkable shift in the priority from public funded to privately financed medical and health care services. The competition of the public system with private provision of health services and maintenance of *quality* in medical and health care have emerged as the most contemporary issues of discussion.

The allocations to the health sector in Five Year Plans of U.P. have been shown in Table 33. There has been a steady increase in the funds allocated for this sector right upto the Tenth Plan. However, when we look at the share of the health sector in the total outlay we find fluctuations from one plan to the other. In the First plan the share of the health sector was as high as 8.50 per cent to total outlay. During the next two plans the share dropped sharply to around 4 per cent. The downward trend continued in the Fourth and the Fifth plan. Health sector received only 2.78% and 1.30% of plan allocations in these two plans respectively. The share of health sector in plan allocation improved to some extent in the Sixth and the Seventh plan, but dropped again in the Eighth and the Ninth plan. During the Tenth Plan again an upswing is witnessed with the health sector being allocated a share of around 4 per cent in the total plan outlay for the state.

The per capita expenditure on health in UP is extremely low (see next section). Though over the plan period the per capita expenditure on health in UP has shown some improvement, it is still much below the national average and far below the level recorded in developed states of India.

### **Health Indicators**

Table 34 highlights the fact that during the last three decades considerable improvements have taken place both at the state as well as the national level in health indicators. The birth, death and infant mortality rates have come down appreciably. Since the beginning of the plan period, birth rate in UP has come down from 41.5 per thousand to 31.6 per thousand in 2002. Similarly death rate in UP has come down from

24.9 per thousand in 1951 to 9.7 per thousand in 2002. Consequently the expectancy of life has gone up.

Despite these improvements, the achievement of the state in terms of health indicators is still far below that of states like Kerala, which ranks first among all states with respect to health indicators (Table 35). U.P. health indicators compare unfavourably not only with the national average but also some of the other poorer states. U.P. has the highest birth rate among the 14 major states in India. Infant mortality rate in U.P. is 83 against 11 in Kerala. but is still higher than the all India figure of 8.1 per thousand. U.P. ranks 12<sup>th</sup> among 14 major states in death rates. Similarly, in terms of life expectancy U.P. is amongst the lowest states. Thus, the state has to cover much ground to improve the health status of its people.

Table 33: Plan-wise Expenditure/Outlays on Health

Plan	Total Plan Expenditure (Rs.Crore)	Expenditure on Health (Rs.Crore)	Expenditure on Health as a % of Total Plan Expenditure
First Plan	153.37	13.03	8.50
Second Plan	233.36	9.88	4.23
Third Plan	560.63	24.70	4.41
Fourth Plan	1165.57	32.44	2.78
Fifth Plan	2909.25	37.74	1.30
Sixth Plan	6594.29	190.79	2.89
Seventh Plan	11948.72	457.33	3.83
Eighth Plan	21679.82	567.87	2.62
Ninth Plan	28309.18	655.69	2.32
Tenth Plan (Outlay)	59708.00	2405.43	4.03

Source: *Annual Plan, Uttar Pradesh, 2004-05.*

Note : Data on expenditure upto Eighth Plan include Uttranchal as well.

Table 34: Indicators of Health in U.P. and India

State/India	Birth Rate (per 000)	Death Rate (per 000)	Infant Mortality Rate (per 000)	Life expectancy (Years)
<b>Uttar Pradesh</b>				
1971	44.9	20.1	167	49.0
1994	35.4	11.0	88	55.4
2001	32.1	10.1	82	N.A.
2002	31.6	9.7	80	63.8
<b>India</b>				
1971	41.2	19.0	129	45.6
1994	28.6	9.2	73	61.0
2001	25.4	8.4	66	N.A.
2002	25.0	8.1	63	65.4

Source: *Health Information of India*, Directorate of Health Services, Govt. Of India.

Still the state has one of the highest incidences of infant and maternal mortality in the entire country. The incidence of blindness, tuberculosis, leprosy and maternal

morbidity is also high. Large proportion of babies is underweight. The NFHS-II shows that 52 percent of children below 3 years of age are under weight and 56 percent are short or stunted. This compares unfavorably with the national level estimates of 47 and 46 respectively.

Table 35: Mortality Indicators in Selected States

States	Infant Mortality Rate 2002			Life Expectancy at birth 2001-06	
	Rural	Urban	Combined	Male	Female
Andhra Pradesh	71	35	62	62.79	65.00
Assam	73	38	70	58.96	60.87
Bihar	62	50	61	65.66	64.79
Gujarat	68	37	60	63.12	64.10
Haryana	64	51	62	66.64	69.30
Karnataka	65	25	55	62.43	66.44
Kerala	11	8	10	71.67	75.00
Madhya Pradesh	89	56	85	59.10	58.01
Maharashtra	52	34	45	66.75	69.76
Orissa	90	56	87	60.05	59.71
Punjab	55	35	51	69.78	72.00
Rajasthan	81	55	78	62.17	62.80
Tamil Nadu	50	32	44	67.00	69.75
Uttar Pradesh	83	58	80	63.54	64.09
West Bengal	52	36	49	66.08	69.34
<b>India</b>	69	40	63	64.11	65.43

Source: Health Information of India, 2000-01

### Utilisation of Health Facilities

The availability and utilisation of health facilities in U.P. also presents a dismal picture. As per the Second National Health and Family Survey 1998-99 only 16% of births in U.P. take place in a medical institution and hardly 21% of children were protected through immunisation (Table 36). The differences between the urban and rural areas in terms of availability of health facilities and health indicators are also glaring.

### Health Infrastructure

Table 37 shows the expansion of health infrastructure in rural areas of U.P. during the period 1991-2000. The decline in the number of sub-centres and PHCs in 2000-01 as compared to 1993-94 is attributed to the fact that in 2000 Uttaranchal was carved out of U.P. as a separate state. The improvement in the health infrastructure between 1993-94 and 2003-04 can be clearly seen from the fact that the total number of hospitals and dispensaries over this period have increased from a total of 8285 during 1993-94 to 8911 in 2003-04.

Uttar Pradesh has the largest number of Sub-Health Centres, PHCs and CHCs in the country. However, when we look at the average population catered by these centres the situation of the state looks far from satisfactory. Each sub-centre in U.P. is

covering as many as over 7000 persons against the prescribed norm of 5000 (Table 38). In fact, among the 16 states listed in the table, Uttar Pradesh occupies the 14<sup>th</sup> rank. The state fares slightly better in the case of rural population covered by PHC. U.P. ranks at 10th among the states in terms of population per PHC. When we look at the rural population covered by a CHC it is found that in U.P. the figure is 4.58 lakhs which is almost four times the norm of 1.20 lakh which has been laid down. Once again U.P. is ranked as low as 13th among the states

Table 36: Statewise Indicators of Utilisation of Medical Services, 1998-99

States	Child Immunization (%)			Births in Medical Institutions (%)			% of births attended by a trained professional	Couple Protection Rate (%)		
1	2			3			4	5		
	Total	Rural	Urban	Total	Rural	Urban	Total	Total	Rural	Urban
Andhra Pradesh	52	48.9	61	50	40.4	78.6	65.2	59.6	58.3	63.4
Assam	17	14.9	50.1	17.6	15	59.9	21.4	43.3	42.3	53.4
Bihar	10.6	9.4	22.4	14.7	12.4	39.9	23.4	24.5	22.9	38.9
Gujarat	48.3	44.9	54.3	46.4	33.2	69.4	53.5	59	57	61.8
Haryana	62.7	58.2	76.5	22.3	14.9	47.1	42	62.4	60.4	67.2
Karnataka	60	60.4	59	51.1	38.7	78.8	59.1	58.3	57.4	59.9
Kerala	79.2	77.9	84.9	93	91.5	99.4	59.4	63.7	63.2	65.5
Madhya Pradesh	22.4	17	41.2	20.4	12.3	49.8	29.7	44.3	40.7	55.2
Maharashtra	78.2	76.8	80.4	52.8	34.6	80.9	22.4	60.9	62.7	58.5
Orissa	43.7	42.2	56.4	22.9	19.3	54.7	33.4	46.8	45.9	54
Punjab	72.1	66.3	86.2	37.5	32	56	62.6	66.7	64.4	71.7
Rajasthan	16	13.1	26.4	21.7	15	47.9	35.8	40.3	37.1	50.4
Tamil Nadu	78.2	76.6	81	79.8	73.1	92.6	83.3	52.1	48.8	58.2
Uttar Pradesh	21.2	19.2	32.3	15.7	11.7	37.3	22.4	28.1	23.9	44.8
West Bengal	43.1	40.8	56.3	40.4	31.5	80.1	44.2	66.6	64.5	73.4
India	42	36.6	60.5	33.6	24.6	65.1	42.3	48.2	44.7	58.2

Source: National Health and Family Survey II, 1998-99.

Note: \* figures for states of Bihar, M.P and U.P include Jharkhand, Chattisgarh and Uttaranchal respectively.

Table 37: Health Infrastructure in Rural Areas of U.P.

Item	1991-92*	1993-94*	2000-01	2003-04
Sub-Centres	20153	20153	18629	18565
Primary Health Centres	3625	3751	3551	3640
Community Health Centres	228	258	287	372
Hospitals/Dispensaries	8020	8285	7788	8911
(a) Allopathic	4794	4861	4236	5359
(b) Ayurvedic/Unani	2189	2299	2210	2210
(c) Homeopathic	1037	1125	1342	1342
Number of Beds	70411	72723	66318	66286
(a) Allopathic	59719	61481	55684	55652
(b) Ayurvedic/Unani	10167	10717	10251	10251
(c) Homeopathic	525	525	383	383

Source: Statistical Diary of UP, Economics and Statistics Division, State Planning Institute, U.P.

\* Including Uttranchal.

Table 38: Availability of Health Services in the Rural Areas of Selected States (2001)

State	Health Facilities (Nos.)			Average Population Covered		
	Sub-Centre	PHC	CHC	Sub-Centre	PHC	CHC (in lakhs)
Andhra Pradesh	10568	1386	219	5226	39844	2.52
Assam	5109	610	100	4551	28113	2.32
Bihar	10337	1648	101	7178	45024	7.35
Gujarat	7274	1001	242	4358	31666	1.31
Haryana	2299	401	64	6511	37329	2.34
Himachal Pradesh	2069	302	65	2650	18154	0.84
Karnataka	8143	1676	249	4275	20772	1.40
Kerala	5094	944	105	4627	24970	2.24
Madhya Pradesh	8129	1178	228	5447	37591	1.94
Maharashtra	9725	1768	351	5731	31523	1.59
Orissa	5927	1352	157	5226	23085	1.99
Punjab	2852	484	105	5625	33148	1.53
Rajasthan	9926	1674	263	4359	25847	1.65
Tamil Nadu	8682	1436	72	4016	24282	4.84
Uttar Pradesh	18629	3551	287	7061	37043	4.58
West Bengal	8126	1262	99	7105	45749	5.83
All India	137311	22842	3043	5401	32469	2.44
Norm				5000	30000	1.20

Source: Directorate General of Health Services, Bulletin on Rural Health Statistics in India, March 2002.

The quality of infrastructure available in the PHCs and CHCs in the state is far from adequate and well below the national average for each type of infrastructure facility (Table 39). Though the state had over 18 thousand PHCs in 2001, most of them are poorly equipped and do not even have proper drinking water facility. Only 40% of the PHCs in U.P. have electricity connection. Only 20 per cent of them have a labour room and barely around 31 per cent have a laboratory for conducting tests. More funds need to be allocated to PHCs so that infrastructure available in them can be raised at least to the national level. However, with respect to CHCs the situation in Uttar Pradesh is somewhat better.

Table 39: Status of Infrastructure in PHCs in U.P. and India (2002-03)

State	No. of centres surveyed	Type of Infrastructure						
		Water	Electri-city	Labour Room	Labo-ratory	Tele-phone	Vehicle working	Deep freezer
	Primary Health Centres							
Uttar Pradesh	486	175	199	97	151	10	68	112
%With facility		36.0	40.9	20.0	31.1	2.1	14.0	23.0
All States	7654	4765	6222	3627	3474	1453	2141	4941
% with facility		62.3	81.3	47.4	45.4	19.0	28.0	64.6
	Community Health Centres							
Uttar Pradesh	24	18	23	23	12	14	23	NA
% with facility		75.0	95.8	50.0	58.3	58.3	41.7	NA
All States	851	606	786	229	508	521	514	NA
% with facility		71.2	92.4	26.9	59.7	61.2	60.4	NA

Source: India Infrastructure Database.

## Equity in Health Care Services

In a state like U.P. where per capita income is low and a sizeable population is living below the poverty line, the question of equity in the availability of medical and health facilities assumes great importance. Studies reveal that the poor have a limited access to public health facilities, which are mainly availed by the better off sections. Analysis of NSS 52<sup>nd</sup> Round (1995-96) shows that out of the hundred rupees spent on curative services in health by the government the poorest 20% get only ten rupees, while the richest 20% get forty one rupees ((Table 40). The survey also revealed that the top 40 per cent households in terms of consumption expenditure accounted for 53 per cent of hospitalisation, whereas the bottom 40 per cent accounted for only 28 per cent hospitalisation.

Table 40: Public Sector Health Expenditure by Wealth Quintile

State	Sex	Poorest 20%	2 <sup>nd</sup> Quintile	3 <sup>rd</sup> Quintile	4 <sup>th</sup> Quintile	Wealthiest 20%
Uttar Pradesh	Male	10.3	9.7	14.4	12.0	53.5
	Female	9.9	9.7	11.3	35.9	33.3
	Total	10.0	9.7	12.5	26.4	41.3
All India	Male	9.7	13.3	15.5	25.1	36.4
	Female	10.7	14.4	20.9	25.6	28.5
	Total	10.2	13.9	18.4	25.3	32.3

Source : Based on NSS 52<sup>nd</sup> Round, 1995-96 taken from World Bank, Poverty in India: The Challenge of Uttar Pradesh, 2002, p. 119.

The findings of the study by Mahal et. al. are particularly revealing and relevant in this context. Using NSS and budget data the study revealed that the poorest 20 per cent of the population captured only 10 per cent of the total net subsidy. Contrary to this the richest 20 per cent captured 33 per cent of the total net subsidy at the all India level. Looking at the share of the total net subsidy reaching the people below poverty line it was found that the 36 per cent population which was below poverty line received only 26 per cent of the total net subsidy. This clearly goes to show that the publicly financed and subsidised curative care subsidies are pro-rich in distribution. This is so primarily because the higher income group people are more likely to seek and avail health care services and also because the rich are more likely to use hospital-based services both inpatients and outpatients. Inter state comparisons revealed inequality in use of curative health facilities was much higher in U.P. as compared to most of the states, Bihar being the worst performer in this respect. Only one-sixth of the inpatient bed-days were utilised by population below poverty line in U.P., whereas the proportion of the poor in total population was above one-third.

*The Mid-Term Appraisal of the Tenth Five Year Plan* by the Planning Commission (Planning Commission 2005) has observed that since hospitalisation is a major contributor to subsidy benefits, utilization at rural public hospitals would enable government subsidies to be more pro-poor, particularly since 61 per cent of the poorest are found to favour public hospitals for inpatient care. The Appraisal suggests that more

equitable health outcomes are possible if we make services work for poor people, create competition among providers and create options for consumers. It recommends that disfunctional public facilities could be energized through franchised network of public and private providers.

#### Box 4

*The state has a large public sector health care infra. structure but only 9 percent of the actually make use of this facility for treatment of ordinary ailments and have to depend mostly on private health care. Unfortunately a vast majority of these private sector providers consist of quacks and faith healers.*

*The UP Tenth Plan Document*

Table 41: Average Medical and Other Related Non-Medical Expenditure Per Treated Ailment During 15 Days By Source Of Treatment (Rs.)

State	Medical expenditure by source of treatment			Other expenditure by source of treatment			Total expenditure by source of treatment		
	Govt.	Other	All	Govt.	Other	All	Govt.	Other	All
<b>Rural Areas</b>									
Uttar Pradesh	363	205	203	45	20	21	408	225	224
India	110	168	157	19	18	19	129	186	176
<b>Urban Areas</b>									
Uttar Pradesh	228	217	211	32	15	16	260	232	227
India	146	185	178	20	15	16	166	200	194

Source: NSS-52<sup>nd</sup> Round (1995-96), Report No. 441.

#### Private Expenditure on Health Care Services

The proportion of persons reporting an ailment in Uttar Pradesh was 6.1 % as per data of the 52<sup>nd</sup> round of NSS. This figure was slightly higher in the case of females as compared to the males. Out of the total cases reporting ailment only 92 % sought treatment. However, among them the proportion of males was higher as compared to females. Utilization was higher in urban areas than in rural areas as would be expected.

As far as treatment as out-patients is concerned, the average expenditure per person per ailment was Rs.202 in the rural areas and Rs.212 in the urban areas of Uttar Pradesh during last fifteen days preceding the survey (Table 41). These figures were considerably higher than the national average. Surprisingly, the expenditure was higher in case of governmental hospitals as compared to other hospitals as the patients have to incur expenditure on tests, medicines, etc. from their own pockets even in government hospitals.

The rate of hospitalisation was 0.8 per cent. Among the cases which reported hospitalisation, 60 per cent in rural and 55 per cent in urban areas were admitted in free (general) wards of hospitals, while only 23 and 20 per cent patients from rural and

urban areas respectively actually received free treatment. The average cost of hospitalisation and related medical expenses per treatment was Rs.4349 in the rural and Rs.5896 in urban areas (Table 41). Average expenditure on hospitalisation has increased considerably since the 42<sup>nd</sup> round of NSS where the average cost of hospitalisation in Uttar Pradesh was around Rs.650 in rural areas and around Rs.920 in urban areas.

Table 41  
Monitorable Health Targets of Tenth Five Year Plan and Achievements in U.P.

Items	Units	Target	Achievement at the end of 2003-04
Establishment of district hospitals	Number	10	NA
Establishment of urban primary health centres	Number	100	NA
Establishment of sub-centres	Number	9000	NA
Establishment of community health centres	Number	200	48
Birth Rate	Per 1000 population	22.00	32.0
Death Rate	Per 1000 population	9.00	10.0
Infant Mortality Rate	Per 1000 population	72.00	81.5
Maternal Mortality Rate	Per lakh population	400	NA
Total Fertility Rate	No. of Children	3.32	NA
Couple protection rate	Percentage	36.20	NA
Ante-natal care	Percentage	70.00	NA
Delivery through trained personnel	Percentage	65.00	NA
Institutional Birth (against delivery through trained personnel)	Percentage	38.00	

Source: Govt. of UP, Annual Plan 2004-2005, Vol. I Part I.

## Population Policy

Concerned with the high population growth in the state the U.P. Government came out with a population policy in 2000. The objective of the population policy is to improve the quality of life of the people of the state. It focuses on population stabilization and noteworthy improvement in health status by the year 2016. The aim of the population policy of UP is to bring down the fertility rate to the replacement level of 2.1 by the year 2016. For achieving this aim the contraceptive prevalence rate is to be raised from 22 in 1998 to 52 in percent in 2016. Infant mortality rates and maternal mortality rates are also to be reduced drastically by the year 2016.

Fertility and contraceptive behaviors are inextricably interlinked to infant and child mortality. These areas are to be addressed in particular in the population policy of UP 2000.

Reductions in IMR and MMR are to be achieved through:

- Increased deliveries by trained personnel
- Increased institutional deliveries
- Reduced anemia among mothers

- Reduced severe malnutrition among children
- Increased use of ORH salts among children suffering from diarrhea
- Increased immunization against killer diseases
- Increased doses of vitamin A to children
- Increased identification of expecting mothers and taking required care

### **Monitorable Target of the Tenth Plan**

The Tenth Five Year Plan has laid down certain monitorable targets for the health sector. Table 42 shows the actual achievement till 2003-04 against the monitorable targets.

### **Role of Private Sector**

The role of private sector in providing medical and health care in UP remains massive. There are 1,57,250 registered private doctors in the state, roughly one doctor per lakh of population. Western UP is better placed from the view point of private providers of health services as compared to other regions, particularly the Eastern region of UP. More than 40 percent private doctors and Dais are concentrated in Western UP. The role of private health providers has been increasing in the recent years, partly reflecting the failure of public health services. There is increasing commercialization of health services. Private hospitals and nursing homes are coming up like private schools and colleges in the sector of education.

### **The role of NGOs and Civil Society**

The role of NGOs, both national and international, in the health sector in UP is also on the rise. They are now playing a significant part in the provision of services and making available medicines to the poorer people and those patients who require specialized care. NGOs have made significant interventions in all regions of the state. NGOs participation received a significant boost after the formation of SIFPSA (State Innovations in Family Planning Services Agency). There are several evidences to show that NGO participation has improved the health status of the people in the intervention area. Several NGOs and civil society organizations have ensured better working and efficiency in the PHCs and the Sub centres.

#### **Box 5**

*Shahid Smarak Seva Samiti, Sultanpur (Eastern UP) has made a remarkable contribution in providing medical care, blood donation and medical service for unattended patients. It has a big team of voluntary donors of blood which provides the much needed life support (in the absence of blood bank) in Sultanpur. Its volunteers cater to the urgent blood requirement in the District Civil Hospital free of charge. The SSSS also runs a 20 bed hospital in the city where free medical advice and medicines are given to patients. It has also an outdoor service that has become very popular in the area and in view of the free treatment; patients are attracted from far off areas. SSSS does not receive any financial assistance from government or any other organization. It is entirely run by voluntary donations.*

## Concerns and Challenges

The main concerns in the health sector of the state include the following:

- Inadequate allocation of money to medical and health sector
- Under utilization or misuse of the allocated money
- Cutting down of health grants
- Underutilization of multilateral aid
- Bureaucratic control over medical and health system
- Inefficient and iniquitous public health services
- Poor recovery rates in government hospitals
- Increasing commercialization of health services

Given the dismal state of affairs of health in the state, the strategy of human development in Uttar Pradesh has to put special focus on improving health services and their delivery in the state. The state has to play the major role in the regard, though the private sector can lend a helping hand. Substantial increase in allocation to the health sector is urgently required to equip the public health system to meet the challenges before it. The delivery mechanism of public health services needs to be improved with focus on the poorer section and women especially in the rural areas. The National Rural Health Mission is a very welcome intervention in this regard. The State government should move in the direction of enlargement of medical and health security for the poor and the aged. A strong and effective regulatory mechanism has to be put in place to ensure that private medical providers do not exploit the poor.

## VIII. Expenditure on Social Sector

### Methodological Issues

This section makes an attempt to assess the extent and direction of expenditure on social sector in the state since 1980-81. Total expenditure of the social sector includes both revenue and capital expenditure. Revenue expenditure is incurred to meet current expenditure on salaries of staff and maintenance of equipment, etc. Capital expenditure contributes to expansion of sector through addition to buildings, equipment, etc. Social Service expenditure comprises expenditure on 12 items on the revenue expenditure part. Within the social services, education expenditure includes expenditure on sports and youth affairs. Health expenditure is defined in two ways. Health I comprises expenditure on the heads of medical, public health and family welfare, whereas Health II includes expenditure on water supply and sanitation. These categories are kept separate as expenditure on water supply and sanitation contributes to health indirectly and is not considered as an integral part of health (Prabhu, 2001). Human priority concerns are derived by adding education, public health, water supply and sanitation and nutrition. However, data on maternal and child health is not included due to non-availability of data.

Nominal expenditure has been converted into real terms using NSDP deflator. Two series of NSDP for the state are available—one based on 1980-81 prices and the

other based on 1993-94 prices. The 1993-94 series has been extended backwards by taking the ratio of NSDP for 1993-94 according to the two series both at current prices and constant prices. The adjusted series of NSDP at 1993-94 prices has been used to estimate expenditure in real terms.

### **Trends in Expenditure**

Revenue expenditure forms the dominant part of total expenditure in the social sector. The share of capital expenditure in total public expenditure in the state has declined from around 22% in 1980-81 to around 10% in 2002-03, whereas revenue expenditure has substantially increased from 78% to 90% in the corresponding period (Table 42). Thus, the fiscal crisis has impacted public expenditure on capital component more, as it not possible to curtail current expenditure on salary of staffs.

The same declining trend in capital expenditure is also been observed in the various of social services, such as education, health I, health II and social security. The share of capital disbursement in social services which was around 5.5% in the mid-eighties has come down to below 4 percent in the late nineties. Capital disbursement on education, health II and social security is extremely low, hardly 1-2 percent of the total expenditure. The share on health I is marginally higher at 4 percent due to higher capital investment in public health and family welfare. Extremely low proportion of capital investment in essential sectors like education, health and social security shows the neglect of the social sector by the policy maker.

### **All Relative Allocation to Social Sectors**

The proportion of individual components in total revenue expenditure indicates the relative priority given to each component by the state government. These shares have been shown in Table 43. The share of education including sports, art and culture varied from 20 percent to 24 percent in pre-reform period, but declined to below 20 percent in the post-reform period. Similarly, the share of health including public health and family welfare in total revenue expenditure varied from 7 to 10 percent in the pre-reform period, but declined sharply to 4-5 percent of the revenue expenditure in the post-reform period. In the case of health II, which includes water supply and sanitation, also a decline is observed after 1990-91. Similar pattern is observed in case of expenditure on social security and welfare. Sharpest decline has occurred in case of rural development expenditure -from around 10 per cent to less than 5 percent.

Table 42: Share of Revenue and Capital Expenditure in Total Expenditure on Social Services in Uttar Pradesh (in Percent)

Year	Total Expenditure		Social Services		Education, Sports, Art and Culture		Health I		Health II		Social Security and welfare	
	Revenue	Capital	Revenue	Capital	Revenue	Capital	Revenue	Capital	Revenue	Capital	Revenue	Capital
1980-81	78.10	21.90	96.81	3.19	99.36	0.64	94.98	5.02	NA	NA	97.44	2.56
1981-82	78.94	21.06	95.38	4.62	NA	NA	92.50	7.50	NA	NA	94.98	5.02
1982-83	84.08	15.92	94.42	5.58	99.42	0.58	89.46	10.54	NA	NA	92.29	7.71
1983-84	83.61	16.39	94.56	5.44	99.03	0.97	91.26	8.74	NA	NA	88.94	11.06
1984-85	81.38	18.62	95.50	4.50	98.89	1.11	92.74	7.26	NA	NA	88.73	11.27
1985-86	83.49	16.51	94.88	5.12	98.89	1.11	90.11	9.89	74.40	25.60	97.77	2.23
1986-87	81.02	18.98	94.55	5.45	98.82	1.18	91.98	8.02	99.53	0.47	96.32	3.68
1987-88	82.71	17.29	94.13	5.87	98.23	1.77	92.09	7.91	97.67	2.33	98.61	1.39
1988-89	87.01	12.99	94.56	5.44	98.12	1.88	91.90	8.10	99.15	0.85	98.33	1.67
1989-90	88.73	11.27	97.41	2.59	99.03	0.97	96.56	3.44	99.86	0.14	99.75	0.25
1990-91	89.01	10.99	95.56	4.44	98.43	1.57	91.93	8.07	98.91	1.09	99.72	0.28
1991-92	93.58	6.42	94.85	5.15	97.80	2.20	91.34	8.66	99.21	0.79	99.07	0.93
1992-93	90.90	9.10	95.40	4.60	97.74	2.26	93.26	6.74	99.19	0.81	97.00	3.00
1993-94	93.33	6.67	96.23	3.77	98.46	1.54	94.55	5.45	99.56	0.44	99.12	0.88
1994-95	93.22	6.78	95.37	4.63	98.51	1.49	93.17	6.83	99.91	0.09	99.76	0.24
1995-96	93.96	6.04	96.43	3.57	98.70	1.30	94.89	5.11	99.82	0.18	99.29	0.71
1996-97	93.05	6.95	95.39	4.61	98.99	1.01	94.72	5.28	99.98	0.02	99.85	0.15
1997-98	93.01	6.99	95.11	4.89	98.71	1.29	94.53	5.47	99.28	0.72	100.00	0.00
1998-99	92.56	7.44	96.81	3.19	99.49	0.51	95.54	4.46	99.97	0.03	99.80	0.20
1999-00	91.90	8.10	96.88	3.12	99.63	0.37	95.27	4.73	98.40	1.60	99.95	0.05
2000-01	90.47	9.53	97.17	2.83	99.14	0.86	96.65	3.35	96.02	3.98	99.42	0.58
2001-02	89.34	10.66	98.10	1.90	99.23	0.77	97.11	2.89	100.00	0.00	99.69	0.31
2002-03	89.93	10.07	96.33	3.67	98.91	1.09	95.54	4.46	100.00	0.00	99.77	0.23

Source: Reserve Bank of India Bulletins

Table 44 shows the trends in expenditure on social services and its main components as a percent of NSDP since 1980-81. The social sector expenditure as a percent of NSDP increased from around 6.5% in 1980-81 to around 8% in 1990-91. But it came down to around 6.5% by 2002-03. Similarly rural development expenditure as percent of NSDP came down from 1.88% in 1990-91 to 0.88% in 2002-03.

Thus, the growing fiscal crisis in the state and changing social priorities under the economic reform agenda had a visible and strong adverse impact on social sector expenditure and its various components.

Table 43: Share of Social Services in Total Revenue Expenditure in  
Uttar Pradesh (in Percent)

Year	EDU/RE	H1/RE	H2/RE	Soc Sec/RE	RD/RE	Social Service/ RE (Excluding RD)	Social Service/ RE (Including RD)
1980-81	20.31	8.70	0.00	4.26	0.00	53.62	53.62
1981-82	20.56	9.16	0.00	5.56	0.00	52.90	52.90
1982-83	21.02	9.31	0.00	5.59	0.00	54.81	54.81
1983-84	20.02	10.45	0.00	4.80	0.00	55.71	55.71
1984-85	20.55	10.49	0.00	3.56	0.00	57.14	57.14
1985-86	21.02	7.68	0.03	1.24	9.61	45.55	55.16
1986-87	19.94	7.45	2.14	1.17	9.52	42.81	52.33
1987-88	18.84	7.62	2.12	1.21	8.07	42.40	50.46
1988-89	20.31	7.45	2.21	1.19	9.12	42.61	51.73
1989-90	24.35	7.05	1.88	1.22	6.15	45.00	51.16
1990-91	22.05	6.52	2.13	1.44	9.92	42.09	52.00
1991-92	19.35	6.00	1.62	1.51	8.11	39.10	47.21
1992-93	19.75	5.81	1.39	1.15	8.66	37.71	46.37
1993-94	17.76	6.95	1.46	1.66	7.36	37.47	44.83
1994-95	18.62	5.83	1.47	1.31	6.69	36.24	42.93
1995-96	19.27	5.73	1.46	1.59	4.39	37.05	41.44
1996-97	20.17	6.01	1.56	1.43	5.31	39.20	44.51
1997-98	18.91	6.41	2.38	1.44	4.41	40.20	44.62
1998-99	21.98	4.73	1.52	1.45	4.73	38.80	43.52
1999-00	19.87	4.42	1.09	1.45	6.76	34.60	41.36
2000-01	19.72	4.54	0.97	1.49	5.94	34.25	40.18
2001-02	20.56	5.38	1.98	1.69	4.52	38.53	43.05
2002-03	16.98	5.05	1.20	2.20	4.75	34.25	39.00

Source: Reserve Bank of India Bulletin, Various Issues

### Critical Expenditure Ratios

In order to judge the extent of political commitment of government to social sector, we have estimated four critical expenditure ratios following Prabhu (2001), that is, Public Expenditure Ratio (PER), Social Allocation Ratio (SAR), Social Priority Ratio (SPR) and Human Expenditure Ratio (HER). PER is the proportion of state income that goes to public expenditure. SAR is the percent of public expenditure earmarked for social services. SPR is the percent of social expenditure devoted to human priority concerns reflected in allocations to education, public health, water supply and sanitation and food and nutrition (1991). HER is the percent of state income devoted to human priority concerns. The trends the social sector expenditure in U.P. are examined in the light of the expenditure norms that were suggested in UNDP (1991) after examining the experience of a number of countries.

The trends in the selected ratios since 1980-81 have been shown in Table 45.

Table 44: Expenditure on Social Services as a Percent of NSDP in Uttar Pradesh

Year	EDU/NSDP	H1/NSDP	H2/NSDP	Soc Sec/ NSDP	RD/NSDP	Soc Ser/ NSDP (excl. RD)	Soc Ser/ NSDP (Incl RD)
1980-81	2.45	1.05	0.00	0.51	0.00	6.47	6.47
1981-82	2.57	1.14	0.00	0.69	0.00	6.60	6.60
1982-83	2.78	1.23	0.00	0.74	0.00	7.25	7.25
1983-84	2.79	1.46	0.00	0.67	0.00	7.75	7.75
1984-85	3.10	1.58	0.00	0.54	0.00	8.61	8.61
1985-86	3.11	1.13	0.00	0.18	1.42	6.73	8.15
1986-87	3.13	1.17	0.34	0.18	1.50	6.73	8.23
1987-88	3.09	1.25	0.35	0.20	1.32	6.96	8.28
1988-89	3.42	1.25	0.37	0.20	1.53	7.17	8.71
1989-90	4.40	1.27	0.34	0.22	1.11	8.14	9.25
1990-91	4.18	1.24	0.40	0.27	1.88	7.99	9.87
1991-92	3.46	1.07	0.29	0.27	1.45	7.00	8.45
1992-93	3.98	1.17	0.28	0.23	1.74	7.59	9.34
1993-94	3.32	1.30	0.27	0.31	1.38	7.01	8.39
1994-95	3.47	1.09	0.27	0.24	1.25	6.75	8.00
1995-96	3.65	1.08	0.28	0.30	0.83	7.01	7.84
1996-97	3.43	1.02	0.27	0.24	0.90	6.67	7.58
1997-98	3.52	1.19	0.44	0.27	0.82	7.48	8.30
1998-99	4.24	0.91	0.29	0.28	0.91	7.48	8.39
1999-00	3.82	0.85	0.21	0.28	1.30	6.66	7.96
2000-01	3.84	0.88	0.19	0.29	1.16	6.67	7.82
2001-02	4.05	1.06	0.39	0.33	0.89	7.58	8.47
2002-03	3.14	0.93	0.22	0.41	0.88	6.34	7.21

Source: Calculated from Reserve Bank of India Bulletins

The important findings emerged from the analysis of social expenditure trends in Uttar Pradesh shown in Table 45 are given below:

1. During the study period in none of the years PER was near the norm of 25 percent of the NSDP in the state. It varied from 12.06 percent in 1980-81 to 20.14 percent of the NSDP in 1992-93. This is largely reflective of the low per capita income levels and low tax-SDP ratio (around 5-6 percent) in the state.
2. The share of social service expenditure out of total revenue expenditure has declined sharply during the study period. In the early eighties the ratio ranged between 53 and 57 percent. Since 1985-86 SAR has steadily declined coming down to around 34% in 2002-03. Thus, during the post reform period SAR has fallen below the norm of 40 percent for revenue expenditure in the social service sector suggested by the UNDP Report. This again is related to the fiscal strains the state budget is facing due to a very high proportion of expenditure being spent on salary component, pensions and interest repayment.
3. SPR is, however, more than the norm of 40 percent as suggested by UNDP in most of the years in the state during the study period. It has increased from 54

percent in 1980-81 to nearly 73 percent in 1990-91. During the post-reform period, the SPR has remained constant around 70 percent in most of the years with few exceptional years.

4. The picture regarding social priority expenditure as a proportion to NSDP (HER) looks disappointing as it has remained below the suggested norm of 5 percent in most of the years under the study period.

Table 45: Social Sector Expenditure Ratios in U.P. (in Percent)

Year	PER (TRE/NSDP)	SAR (SSRE/TRE)	SPR (SPRE/SSRE)	HER (SPRE/NSDP)
1980-81	12.06	53.62	54.11	3.50
1981-82	12.48	52.90	56.19	3.71
1982-83	13.22	54.81	55.34	4.01
1983-84	13.92	55.71	54.70	4.24
1984-85	15.07	57.14	54.32	4.68
1985-86	14.78	45.55	63.06	4.24
1986-87	15.72	42.81	68.97	4.64
1987-88	16.41	42.40	67.42	4.69
1988-89	16.83	42.61	70.32	5.04
1989-90	18.09	45.00	73.95	6.02
1990-91	18.98	42.09	72.93	5.82
1991-92	17.90	39.10	68.99	4.83
1992-93	20.14	37.71	71.50	5.43
1993-94	18.72	37.47	69.82	4.90
1994-95	18.63	36.24	71.52	4.83
1995-96	18.92	37.05	68.06	4.77
1996-97	17.02	39.20	66.88	4.46
1997-98	18.60	40.20	65.27	4.88
1998-99	19.28	38.80	70.63	5.28
1999-00	19.25	34.60	71.17	4.74
2000-01	19.47	34.25	71.16	4.74
2001-02	19.69	38.53	69.28	5.25
2002-03	18.49	34.25	64.66	4.10

Source: Calculated from Reserve Bank of India Bulletins

Note: PER : Public Expenditure Ratio                      SAR : Social Allocation Ratio  
 SPR : Social Priority Expenditure Ratio                      HER : Human Expenditure Ratio  
 TRE : Total Revenue Expenditure                      NSDP: Net State Domestic Product  
 SSRE: Social Service Revenue Expenditure  
 SPRE: Social Priority Revenue Expenditure

## Trends in Real per Capita Expenditure on Social Sector

Table 46 shows the trends in real per capita expenditure on social services in U.P. In general, real per capita expenditure on social services and its individual components show positive trend over the study period in the state with some fluctuations. The main exceptions to the general trend are medical and health and rural development, which suffered a clear decline in per capita expenditure in real terms during the post reform period.

Table 46: Trends in Real per Capita Revenue Expenditure on Social Sectors (in Rs.)

Year	RRE	RSE	REE	REMH	REWS	RESSW	RERD
1980-81	461.27	247.34	93.70	40.13	0.00	19.64	0.00
1981-82	477.09	252.37	98.09	43.70	0.00	26.54	0.00
1982-83	532.19	291.72	111.89	49.55	0.00	29.74	0.00
1983-84	568.60	316.79	113.84	59.44	0.00	27.30	0.00
1984-85	610.92	349.10	125.55	64.08	0.00	21.75	0.00
1985-86	608.35	277.08	127.85	46.72	0.15	7.56	58.49
1986-87	660.05	282.56	131.60	49.15	14.15	7.75	62.81
1987-88	703.97	298.46	132.64	53.67	14.91	8.55	56.79
1988-89	798.26	340.15	162.12	59.45	17.64	9.52	72.78
1989-90	862.71	388.25	210.05	60.79	16.26	10.50	53.08
1990-91	938.53	394.99	206.93	61.15	20.00	13.48	93.07
1991-92	871.85	340.85	168.67	52.33	14.15	13.17	70.75
1992-93	973.73	367.18	192.35	56.62	13.54	11.17	84.34
1993-94	911.53	341.54	161.85	63.34	13.27	15.09	67.06
1994-95	938.27	340.02	174.69	54.73	13.75	12.34	62.82
1995-96	966.80	358.19	186.31	55.36	14.13	15.34	42.47
1996-97	950.26	372.49	191.64	57.14	14.82	13.55	50.48
1997-98	1007.24	404.95	190.42	64.53	23.97	14.48	44.43
1998-99	1050.01	407.37	230.80	49.69	15.92	15.20	49.62
1999-00	1093.75	378.46	217.33	48.33	11.90	15.81	73.96
2000-01	1123.23	384.69	221.49	51.04	10.89	16.77	66.68
2001-02	1158.19	446.21	238.17	62.33	22.91	19.60	52.34
2002-03	1098.71	376.35	186.51	55.49	13.24	24.14	52.19

Source: Calculated from Reserve Bank of India Bulletins

Compound annual growth rate in per capita real expenditure on social services and its individual components for the pre and post reform periods have been shown in Table 47. Growth rates for the first period (1980-81 to 1990-91) are substantially higher than the latter period (1991-92 to 2002-03).

Table 47: CAGR of Individual Components of Real per Capita Revenue Expenditure on Social Sectors in UP

Type of Expenditure	1980-91	1991-2003	1980-2003
RRE	6.9* (21.87)	2.3* (7.87)	4.0* (14.81)
RSE	3.80* (3.95)	1.6* (3.28)	1.9* (6.72)
REE	7.7* (9.48)	2.4** (3.15)	3.7* (8.96)
REMH	3.2** (2.77)	-0.30 (-0.35)	0.6*** (1.67)
REWS	-----	1.0 (0.46)	---
RESSW	-11.2** (-2.85)	4.8* (4.96)	-0.2 (-0.19)
RERD	----	-2.3 (-1.29)	---

Source: Estimated from the data of Table 46.

Note: Figures in brackets give T values.

\* indicates significance at 1 percent, \*\* indicates significance at 5 percent level.

Further statistical analysis of the growth rates based on a quadratic function confirms that there has been a clear deceleration in the growth of real per capita expenditure incurred on social services as well as its individual components in the state during the study period (Table 48).

Table 48: Estimated Results of Deceleration for Various Components of Real per Capita Revenue Expenditure on Social Sectors during 1980-2003 in UP

Year	Value Co-efficient			Adj. R <sup>2</sup>	Deceleration or Not
	Constant	B co-efficient	C co-efficient		
RRE	-158.60* (-12.72)	0.083* (13.23)	-0.002* (-7.00)	0.97	D
RSE	-70.75* (-3.14)	0.039 (3.40)	-0.001 (-1.76)	0.69	D
REE	-162.71* (-5.95)	0.084* (6.13)	-0.002* (-3.56)	0.86	D
REMH	-77.01** (-2.69)	0.041** (2.83)	-0.001** (-2.46)	0.25	D
RESSW	335.19* (4.39)	-0.168* (-4.36)	0.007* (4.42)	0.44	D

Source: Estimated from the data of Table 39.

Note: The values in the parenthesis are t-values \* indicates 1 percent, \*\* indicates 5 percent level of significance. For testing deceleration of various components, we have taken the equation  $\log Y = a + bT + cT^2$ . 'D' indicates deceleration, whereas ND indicates no deceleration. For deceleration, both b and c should be statistically significant and 'c' must be negative. Other wise, it is considered as ND.

## Inter-State Comparison

In the end we may look at the levels of per capita social sector expenditure in U.P. in relation to other states (Table 49). During 1990-91 and 2000-01 per capita real expenditure on social services in U.P. was Rs. 3664 against the all state average of Rs. 6071. Significantly social sector expenditure in U.P. is lower even as compared to other BOMARU states. This was true for the different components of social sector as well. These figures are reflective of the low priority to social sector given by the policy makers in the state and underscore the need of substantial improvement in levels of social sector expenditure in U.P. to bring it out of the current morass of poverty and low human development.

Table 49: Per Capita Aggregate Real Expenditures by State Governments During 1990-

States	Revenue Expenditure				Total expenditure			
	Educational	Health	Other Social Services	Social services	Education	Health	Other Social Services	Social Services
Assam	36.90	7.04	12.08	56.02	37.11	7.47	12.67	57.25
Bihar	26.78	5.94	8.95	41.67	26.98	6.01	10.19	43.18
Goa	96.82	33.38	44.56	174.76	101.87	38.86	61.89	202.62
Gujarat	41.37	9.88	22.99	74.23	41.63	10.09	27.96	79.68
Haryana	35.03	7.69	24.94	67.65	35.67	8.22	28.62	72.51
H.P.	64.71	21.02	35.04	120.77	66.74	23.18	48.88	138.80
J&K	46.10	18.74	30.48	95.32	49.43	21.15	46.52	117.10
Karnataka	33.70	8.87	20.38	62.95	33.98	9.43	21.91	65.32
Kerala	41.37	10.03	15.81	67.21	42.04	10.47	16.30	68.81
MP	28.10	7.72	23.97	59.79	28.83	7.99	25.44	62.26
Maharashtra	42.24	8.97	20.47	71.67	42.47	9.22	21.27	72.97
Manipur	73.34	15.46	23.58	112.39	78.45	15.99	37.15	131.59
Meghalaya	55.12	16.53	28.64	100.29	56.44	19.74	42.33	118.51
Mizoram	114.49	36.21	89.54	240.24	115.73	38.75	117.35	271.84
Nagaland	60.37	22.74	58.19	141.30	64.88	29.33	84.60	178.81
Orissa	25.95	5.99	17.24	49.18	26.19	6.30	18.43	50.92
Punjab	42.56	12.46	14.15	69.17	43.23	12.84	15.69	71.76
Rajasthan	33.48	8.87	17.53	59.88	33.82	9.38	23.90	67.11
Tamil Nadu	39.26	10.49	25.77	75.52	39.66	10.91	27.87	78.44
Tripura	57.96	11.62	33.88	103.47	58.68	12.57	47.63	118.88
UP	21.74	5.55	7.99	35.27	22.01	5.93	8.70	36.64
West Bengal	28.36	7.99	12.47	48.72	28.53	8.25	12.89	49.67
All States	32.28	8.24	17.35	57.86	32.68	8.63	19.40	60.71

91 to 2000-01 (in '00 Rs.)

Source: Ravindra H. Dholakia, "Trends in Regional Disparity in Human and Social Development in India," paper presented at the IEA Seminar on Accelerated Economic Growth and Regional Balance, held at ISID, New Delhi during September 16-18 2005.

## IX. Conclusion

This paper has looked at the interlinkages between economic growth and human development in the state of U.P., which continues to be a low income state with low levels of human development. Economic growth in the state has been too slow to bring about a significant improvement in the social sector and the human development levels. However, poverty levels have significantly declined since the early seventies. Thus, the major impact of economic growth in the state, even though slow, has been on poverty levels. In the wake of the green revolution agricultural and overall growth rates picked up in U.P. resulting in higher employment in agriculture and rise in rural wages leading to a visible decline in rural poverty in the seventies and the eighties. Surprisingly, the declining trend in poverty levels has continued during the nineties in spite of a slow down in the agricultural and overall economic growth in the state. The process of diversification in the rural economy and the labour intensive employment structure of the state economy seemed to have played a part in this process. Furthermore, the large public expenditure on anti-poverty and rural employment programmes has also contributed to the decline in poverty levels.

There has been a visible and in some cases even marked improvement in indicators of social development in the state during the planning period. However, the state lags behind most of the states in the level of human development. There is widespread illiteracy especially among the women and in the rural areas. Mortality rates are high. There is visible discrimination against the girl child in matters related to education and health. Consequently the women's agency remains weak. There are sharp economic and social inequalities among caste groups and minorities. These inequalities act as hindrance towards rapid social progress and restrict the possibility for effective mobilization of the people on socio-economic issues facing them. The civil society movement remains weak. For most of the planning period public policy has been marked with an inertia and lack of concern with the social and developmental issues affecting the large masses. Things are, however, changing gradually in the recent past mainly through the outside pressure generated by the Central government and the multilateral donor agencies.

While lack of economic development has affected improvement in social indicators, the low level of human development acts as a major constraint on rapid economic development in the state. Thus, the state is caught in a vicious circle of slow economic development and low human development. The major challenge in the state is how to come out of this vicious circle and convert it into a virtuous circle.

The central lesson emerging from this study and buttressed by the experience of other socially more developed states in the country is that a pro-active and concerned public policy plays a critical role in influencing the human development outcomes and promoting economic growth. There is much that the policy makers in the state can learn from the experience of other states in the country to set it on a path of human development with rapid economic growth.

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## Appendix 1

### District wise Literacy Rate and No. of Primary Schools in U.P.

District/Region	Literacy Rate			No. of Primary Schools per lakh of Population	
	1981	1991	2001	1991	2001
<b>Western Region</b>					
Bijnor	26.72	40.53	58.1	49	83
Moradabad	19.82	31.03	44.7	47	46
Jyotiba Phule Nagar *		49.5		88	
Rampur	16.34	25.37	38.8	49	87
Saharanpur	27.54	42.11	61.2	47	55
Muzaffarnagar	30.25	44	60.7	49	61
Meerut	34.68	51.3	64.8	45	52
Baghpat *			64.2		60
Ghaziabad	36.28	55.22	69.7	32	35
Gautam Buddha Nagar *			68.7		52
Bulandshahar	28.97	44.71	59.4	47	60
Aligarh	31.35	45.21	58.5	49	55
Hathras *			62.5		81
Mathura	30.63	45.03	61.5	60	57
Agra	33.34	48.58	62.6	49	48
Firozabad	33.2	46.3	64.5		52
Etah	27.1	40.15	54.6	57	93
Mainpuri	33.74	50.21	65.1	66	97
Budaun	16.1	24.64	38.2	61	60
Bareilly	22.04	32.78	47.8	53	66
Pilibhit	20.44	32.1	49.8	59	66
Shahjahanpur	21.44	32.07	49.1	67	74
Farrukhabad	32.02	47.1	60.9	55	75
Kannauj *			61.9		82
Etawah	37.29	53.69	69.6	64	111
Auraiya *			70.5		108
<b>Central Region</b>					
Kheri	17.7	29.71	48.4	61	62
Sitapur	19.44	31.41	48.3	67	73
Hardoi	22.19	36.3	51.9	60	64
Unnao	25.28	38.7	54.6	68	68
Lucknow	40.33	57.49	68.7	46	52
Rae Bareli	23.08	37.78	53.8	52	66
Kanpur Dehat	34.71	50.71	66.4		75
Kanpur Nagar	51.89	68.75	74.4	50	69
Fatehpur	25.97	44.69	56.3	58	75
Barabanki	18.87	30.42	47.4	67	61

<b>Bundelkhand</b>					
Jalaun	35.95	50.72	64.5	85	124
Jhansi	37.06	51.6	65.5	64	63
Lalitpur	21.34	32.12	49.5	81	91
Hamirpur	26.31	39.64	57.4	64	97
Mahoba *			53.3		97
Banda	23.3	35.7	54.4	68	88
Chitrakoot *			65		101
<b>Eastern Region</b>					
Pratapgarh	23.81	40.4	57.6	53	68
Allahabad	27.99	42.66	62.1	42	40
Kaushambi *			46.9		55
Bahraich	15.57	24.39	35.2	58	66
Shrawasti *			33.8		73
Gonda	16.32	27.34	42.6	64	66
Balrampur *			34.6		64
Faizabad	25.61	39.9	56.3	52	65
Ambedkar Nagar*			58.4		64
Sultanpur	22.44	38.69	55.8	65	67
Siddharthnagar	17.39	27.09	42.3		60
Mahrajanj	17.64	28.9	46.6		47
Basti	22.04	35.54	52.5	54	65
Sant Kabir Nagar *			50.9		53
Gorakhpur	27.32	43.3	58.5	43	61
Kushinagar *			46.9		47
Deoria	23.2	37.3	58.6	50	72
Mau	27.6	43.8	62.2		93
Azamgarh	23.98	39.22	57	42	65
Jaunpur	26.3	42.22	59.8	44	39
Ballia	28.34	43.89	57.9	57	65
Sant Ravidas Nagar*			57.9		46
Varanasi	31.85	47.7	66.1	37	37
Chandauli *			59.7		57
Ghazipur	27.62	43.27	59.6	45	66
Mirzapur	25.4	39.68	55.3	64	69
Sonbhadra	20.62	34.4	49.2		73

**Source:** Literacy figures from Census of India

No. of schools per lakh population from District Development Indicators, State Planning Institute, U.P.

Note: \* Newly created districts

## Appendix II

### Ranking of Districts According to Literacy Rate and No. of Primary Schools Per Lakh of Population

District/Region	Rank in Literacy		Rank in No. Of Schools		Difference in rank in literacy and ranks in no of schools	
	1991	2001	1991	2001	1991	2001
<b>Western Region</b>						
Bijnor	26	33	32	14	6	-19
Moradabad	46	63	37	65	-9	2
Jyotiba Phule Nagar	52		11			-41
Rampur	52	66	32	13	-20	-53
Saharanpur	25	22	37	54	12	32
Muzaffarnagar	18	24	32	45	14	21
Meerut	6	12	41	58	35	46
Baghpat *		15		48		33
Ghaziabad	3	3	48	70	45	67
Gautam Buddha Nagar*	5		58			53
Bulandshahar	16	28	37	48	21	20
Aligarh	14	30	32	54	18	24
Hathras *		17		16		-1
Mathura	15	21	17	52	2	31
Agra	10	16	32	62	22	46
Firozabad	13	13		58	-13	45
Etah	28	43	22	8	-6	-35
Mainpuri	9	10	8	5	-1	-5
Budaun	53	67	15	48	-38	-19
Bareilly	41	58	26	30	-15	-28
Pilibhit	43	51	19	30	-24	-21
Shahjahanpur	44	55	5	20	-39	-35
Farrukhabad	12	23	24	17	12	-6
Kannauj *		20		15		-5
Etawah	4	4	10	2	6	-2
Auraiya *		2		3		1
<b>Central Region</b>						
Kheri	48	56	15	44	-33	-12
Sitapur	45	57	5	21	-40	-36
Hardoi	37	49	17	40	-20	-9
Unnao	33	43	3	27	-30	-16
Lucknow	2	5	40	58	38	53
Rae Bareli	35	46	28	30	-7	-16
Kanpur Dehat	8	7		17	-8	10
Kanpur Nagar	1	1	30	25	29	24
Fatehpur	17	39	20	17	3	-22
Barabanki	47	59	5	45	-42	-14

<b>Bundelkhand</b>						
Jalaun	7	13	1	1	-6	-12
Jhansi	5	9	10	43	5	34
Lalitpur	42	52	2	10	-40	-42
Hamirpur	31	37	10	5	-21	-32
Mahoba *		47		5		-42
Banda	38	45	3	11	-35	-34
Chitrakoot *		11		4		-7
<b>Eastern Region</b>						
Pratapgarh	27	36	26	27	-1	-9
Allahabad	23	19	45	67	22	48
Kaushambi *		60		54		-6
Bahraich	54	68	20	30	-34	-38
Shrawasti *		70		21		-49
Gonda	50	64	10	30	-40	-34
Balrampur *		69		40		-29
Faizabad	29	39	28	36	-1	-3
Ambedkar Nagar *	32		40			8
Sultanpur	34	41	9	29	-25	-12
Siddharthnagar	51	65		48	-51	-17
Mahrajganj	49	62		63	-49	1
Basti	39	48	25	36	-14	-12
Sant Kabir Nagar *	50		57		0	7
Gorakhpur	21	30	44	45	23	15
Kushinagar *		60		63		3
Deoria	36	29	30	24	-6	-5
Mau	20	18		8	-20	-10
Azamgarh	32	38	45	36	13	-2
Jaunpur	24	25	43	68	19	43
Ballia	19	34	22	36	3	2
Sant Ravidas Nagar*	34		65			31
Varanasi	11	8	47	69	36	61
Chandauli *		26		52		26
Ghazipur	22	27	41	30	19	3
Mirzapur	30	42	10	25	-20	-17
Sonbhadra	40	54		21	-40	-33

Source: Based on Appendix 1.

### Appendix III

#### Demographic Indicators at the District Level

District	SEX RATIO				CHILD-WOMEN RATIO			TOTAL FERTILITY RATE		
	1971	1981	1991	2001	1971	1981	1991	1981	1991	2001
<b>Western Region</b>										
Agra	829	821	832	852	753	605	660	4.2	4.9	3.8
Aligarh	834	840	842	861	755	627	691	4.8	5.7	4.5
Bareilly	817	830	839	872	804	695	682	5.3	5.8	4.9
Bijnore	853	863	871	896	791	726	706	5.2	6.3	4.6
Badaun	812	801	810	841	757	666	712	5.7	6.3	5.5
Bulandshahar	854	863	856	881	759	665	585	5.3	5.9	4.4
Etah	833	821	824	847	780	610	685	4.7	6.0	4.9
Etawah	826	831	831	856	719	641	625	4.8	5.1	4.0
Farrukhabad	817	821	835	860	687	636	643	4.2	5.4	4.3
Ferozabad	926	879	832	851	695	636	687	4.2	6.7	4.8
Ghaziabad	815	821	832	860	706	645	659	4.7	4.5	3.9
Hardwar	811	817	846	868	706	645	616	4.7	5.4	4.1
Mainpuri	833	821	833	855	700	610	654	4.8	5.8	4.4
Mathura	822	811	816	841	826	642	705	4.5	5.7	4.6
Meerut	831	831	852	871	741	642	663	4.7	5.1	3.9
Moradabad	837	842	852	885	785	733	733	5.1	5.5	5.0
Muzaffar Nagar	831	843	860	872	787	618	667	4.9	5.8	4.4
Pilibhit	827	841	853	876	716	714	692	4.8	6.3	4.9
Rampur	836	843	858	882	771	717	731	5.5	5.9	5.1
Saharanpur	821	832	851	868	702	638	668	4.2	5.5	4.0
Shahjahanpur	797	841	816	838	665	657	637	5.3	5.5	4.8
<b>Central Region</b>										
Barabanki	851	851	858	886	622	577	584	3.7	5.2	4.7
Fatehpur	901	891	882	892	684	625	610	4.7	6.1	4.5
Hardoi	825	821	818	843	692	644	624	4.8	5.1	4.8
Kanpur Dehat	831	849	843	856	689	565	630	3.7	6.2	4.2
Kanpur Nagar	812	830	824	869	475	390	435	3.7	3.9	2.6
Lakhimpur Kheri	824	841	842	875	658	642	595	4.5	5.1	4.7
Lucknow	841	841	866	891	600	509	487	3.3	4.4	3.1
Rae Bareilly	944	940	931	949	616	596	594	4.7	6.0	4.3
Sitapur	829	841	833	862	701	621	606	4.4	5.1	4.7
Unnao	889	881	873	898	680	576	570	4.7	5.7	4.1
<b>Bundelkhand</b>										
Banda	871	860	841	860	768	654	646	4.3	5.8	4.6
Hamirpur	878	860	841	852	800	620	630	4.6	4.9	4.2
Jalaun	857	831	829	847	757	606	590	4.1	4.9	3.7
Jhansi	871	861	863	870	740	614	584	4.3	4.3	3.4
Lalitpur	845	851	863	884	765	700	664	6.1	5.6	4.9

District	SEX RATIO				CHILD-WOMEN RATIO			TOTAL FERTILITY RATE		
	1971	1981	1991	2001	1971	1981	1991	1981	1991	2001
<b>Eastern Region</b>										
Allahabad	898	890	875	882	678	636	633	3.7	5.8	4.2
Azamgarh	996	1020	1007	1026	653	632	636	4.4	5.8	4.5
Bahraich	841	850	841	865	562	649	611	4.6	5.6	5.2
Ballia	975	981	946	952	599	591	583	3.1	5.0	3.8
Basti	903	921	916	916	638	617	638	4.5	5.5	4.7
Deoria	958	981	967	1003	638	653	647	4.0	5.8	4.4
aizabad	926	930	924	940	617	582	594	3.9	5.4	4.0
Ghazipur	977	981	957	974	601	615	627	3.5	5.2	4.3
Gonda	875	890	873	899	593	618	612	3.9	6.4	4.7
Gorakhpur	922	940	924	959	647	626	627	4.1	5.3	4.3
Jaunpur	1011	1001	994	1021	636	638	637	3.8	5.6	4.3
Maharajganj	913	919	909	933	713	653	637	4.0	5.0	5.0
Mau	989	996	974	984	636	582	641	3.9	5.6	4.6
Mirzapur	903	881	883	897	804	651	690	3.5	6.0	4.7
Pratapgarh	1016	1001	987	983	613	662	594	3.9	5.6	4.2
Siddarth Nagar	919	925	913	946	674	617	636	4.5	6.4	5.1
Sonebhadra	858	874	862	896	711	651	667	3.5	5.3	4.8
Sultanpur	970	970	934	980	573	601	603	4.1	5.8	4.4
Varanasi	909	908	896	908	638	633	664	3.3	5.1	4.1
<b>Uttar Pradesh</b>	<b>879</b>	<b>885</b>	<b>879</b>	<b>898</b>	<b>685</b>	<b>627</b>	<b>631</b>	<b>4.3</b>	<b>5.6</b>	<b>4.4</b>

Source: Column 1 to 4 : Census of India 1971, 1981, 1991 and 2001.

Column 5 to 7 : Calculated from Census of India 1971, 1981, 1991

Column 8 : Census of India, 1981, Occasional Paper No.13 of 1988.

Column 9 : Census of India, 1991, U.P. District Profile, 1991.

Column 10 : "District Level Estimates of Fertility from India's, 2001 Census," Economic and Political Weekly, Vol.XVII, No.7, February 2002.

# Appendix IV

## Districtwise Female Literacy Rates

District	1971		1981		1991		2001	
	Male	Female	Male	Female	Male	Female	Male	Female
<b>Western Region</b>								
Agra	37.46	16.52	44.65	19.92	63.09	30.83	79.32	48.15
Aligarh	35.09	12.65	44.04	16.24	60.19	27.17	73.22	43.88
Bareilly	24.27	9.92	30.11	10.79	43.33	19.85	59.12	35.13
Bijnore	28.35	10.58	37.03	14.76	52.56	26.47	70.18	47.28
Badaun	18.19	5.85	23.02	7.54	33.96	12.82	49.85	25.53
Bulandshahar	32.81	9.16	42.47	13.34	61.96	24.30	75.55	42.82
Etah	30.59	11.01	38.69	13.10	54.09	22.91	69.13	40.65
Etawah	38.98	16.61	48.69	23.58	66.24	38.34	81.15	38.49
Farrukhabad	34.31	13.85	42.70	19.08	59.48	31.97	72.40	50.35
Ferozabad	34.31	13.85	42.70	19.08	59.76	29.85	77.81	53.02
Ghaziabad	39.56	16.02	48.68	21.32	68.64	38.81	81.04	59.12
Hardwar	39.56	16.02	48.68	21.32	59.51	34.93	75.06	52.60
Mainpuri	33.74	12.83	45.56	18.49	64.26	33.05	78.27	52.67
Mathura	36.60	10.51	45.02	12.92	62.55	23.04	77.60	43.77
Meerut	38.21	16.01	46.73	20.30	64.47	35.62	76.31	54.12
Moradabad	23.47	9.54	27.31	10.93	41.65	18.34	56.66	33.32
Muzaffar Nagar	30.93	12.65	40.72	17.50	56.63	29.12	73.11	48.63
Pilibhit	24.14	7.78	27.02	5.56	44.37	17.22	63.82	35.84
Rampur	17.70	7.17	22.63	8.88	33.79	15.31	48.12	27.87
Saharanpur	31.53	13.52	39.13	18.06	53.85	28.10	72.26	51.42
Shahjahanpur	24.09	8.31	30.10	6.34	42.68	18.59	60.53	34.68
<b>Central Region</b>								
Barabanki	21.65	5.54	28.88	7.21	43.00	15.41	60.12	35.64
Fatehpur	31.71	8.90	38.07	12.48	59.88	27.25	73.07	44.62
Hardoi	27.83	8.86	32.67	9.52	49.45	19.75	65.08	37.62
Kanpur Dehat	37.50	15.49	43.76	19.51	62.88	35.92	76.84	54.49
Kanpur Nagar	45.77	25.37	53.40	31.95	76.73	58.82	82.08	72.50
Lakhimpur Kheri	21.41	6.40	26.24	7.61	40.58	16.35	61.03	35.89
Lucknow	41.91	24.52	49.32	29.71	66.51	46.88	76.63	61.22
Rae Bareilly	28.60	7.41	34.94	10.47	53.30	21.01	69.03	40.44
Sitapur	24.27	7.03	28.79	8.38	43.10	16.90	61.02	35.08
Unnao	29.00	9.09	36.78	12.34	51.63	23.62	67.62	42.40
<b>Bundelkhand</b>								
Banda	29.31	5.84	35.99	8.61	51.53	16.44	69.89	37.10
Hamirpur	31.15	7.83	38.94	11.57	55.13	20.88	72.76	40.65
Jalaun	40.20	12.40	50.16	18.96	66.21	31.60	79.14	50.66
Jhansi	35.65	12.72	50.67	21.38	66.76	33.76	80.11	51.21
Lalitpur	25.28	7.48	31.11	9.96	45.22	16.62	64.45	33.25

District	1971		1981		1991		2001	
	Male	Female	Male	Female	Male	Female	Male	Female
<b>Eastern Region</b>								
Allahabad	35.65	10.76	41.51	12.81	59.14	23.45	77.13	46.61
Azamgarh	29.96	8.21	38.27	12.20	56.13	22.67	70.50	42.44
Bahraich	18.84	4.28	24.35	5.29	35.57	10.73	46.32	23.27
Ballia	33.25	9.80	41.85	14.29	60.76	26.13	73.15	43.92
Basti	25.04	5.18	31.66	7.94	51.68	17.82	75.55	45.45
Deoria	29.38	6.03	37.16	9.07	55.34	18.75	76.31	43.56
Faizabad	29.73	8.09	38.19	12.15	55.49	22.97	70.73	43.35
Ghazipur	30.75	9.29	41.45	13.63	61.48	24.38	75.45	44.39
Gonda	22.19	4.74	25.99	5.45	40.00	12.58	56.93	27.29
Gorakhpur	30.43	8.20	36.66	10.36	60.61	24.49	76.70	44.48
Jaunpur	34.52	8.80	41.86	10.89	62.24	22.39	77.16	43.53
Maharajganj	29.38	6.03	37.16	9.07	45.67	10.28	65.40	28.64
Mau	29.73	8.09	38.19	12.15	59.44	27.86	78.97	50.86
Mirzapur	29.61	8.08	35.10	10.62	54.75	22.32	70.51	39.89
Pratapgarh	31.18	6.02	38.91	8.81	60.29	20.48	74.61	42.63
Siddarth Nagar	25.04	5.18	31.66	7.94	40.91	11.84	58.68	28.35
Sonebhadra	29.61	8.08	35.10	10.62	47.56	18.65	63.79	39.89
Sultanpur	28.66	6.72	35.14	9.37	55.36	20.84	71.85	41.81
Varanasi	39.99	13.28	45.95	16.25	64.37	28.87	83.66	48.59
<b>Hill Region</b>								
Almora	45.89	11.53	56.66	20.27	79.96	39.60	90.15	61.43
Chamoli	48.92	9.59	57.40	18.34	82.01	27.72	89.89	63.00
Dehradun	51.71	33.40	61.15	42.03	77.95	59.26	85.87	71.22
Garhwal	49.32	16.52	56.26	27.13	82.46	49.44	91.47	66.14
Nainital	41.33	20.17	46.81	27.10	67.88	43.19	87.39	70.98
Pithoragarh	49.68	14.63	58.12	20.30	79.44	38.37	90.57	63.14
Tehri Garhwal	36.38	4.92	47.99	9.42	72.10	26.41	85.62	49.76
Uttarkashi	37.02	5.37	46.32	9.17	68.74	23.57	84.52	47.48
<b>UP</b>	<b>31.50</b>	<b>10.55</b>	<b>33.49</b>	<b>14.04</b>	<b>55.73</b>	<b>25.31</b>	<b>70.73</b>	<b>42.98</b>

Source: Census of India, 1971, 1981, 1991 and 2001.